


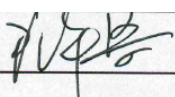
Shanghai Center for Clinical Laboratory

Evaluation report

No. SCCL PG2017 No.6

| | | | | | |
|--------------------------|--|--------------------------|------------------------|-------|---|
| Evaluation object | Automated mass spectrometry microbial identification system | | | | |
| Model / specification | Autof ms1000 | Evaluation category | Performance evaluation | Brand |  |
| Entrusted party | Autobio Diagnostics Co., Ltd | | | | |
| Manufacturer | Autobio Diagnostics Co., Ltd | | | | |
| Sampling No. | / | Sampling date | / | | |
| Date of entrustment | 2017.8.7 | Sampling place | / | | |
| Shelf life | / | Serial No./Lot No. | Serial No. 11011001001 | | |
| Number of sample | 1 unit | Sampling quantity | / | | |
| Strain quantity | 135 strains | Date of strains received | 2017.8.7 | | |
| Basis for the evaluation | According to the requirement of "Quality control database cooperative construction for Autof ms1000 automated mass spectrometry microbial identification system" technical service agreement. Evaluate the conformance of Autof ms1000 identification results to the name of ATCC international standard strains | | | | |
| Evaluation project | The identification accuracy of mass spectrometry automated microbial identification system (Autof ms1000) | | | | |
| Evaluation date | 2017.8.7----2017.11.15 | | | | |
| Evaluation result | The evaluation experiment was strictly in accordance with the workflow recommended by the system user manual and general international mass spectrometric identification process, the identification results were compared to the ATCC international standard strains. Results show the identification conformance performed by Autof ms1000 from Autobio Diagnostics Co., Ltd was 99.41% based on 169 ATCC international standard strains. The identification conformance regarding to 176 clinic strains was 100%. | | | | |

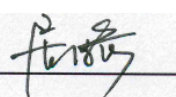
Approval:



Title: Director of SCCL

Date: 2017-12-18

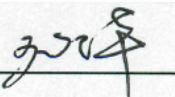
Review:



Title: Deputy Director of SCCL

Date: 2017-12-14

Edit/Operate:



Title: Head of SCCL Microbiology Lab

Date: 2017-12-4

No. SCCL PG2017 No.6

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|---|--|---|---------------------|-------------------|
| Evaluation place | Shanghai Center for Clinical Laboratory | No photo contained in this report | | |
| Entrusted party | Address | No. 87 Jingbei Yi Road, National Eco & Tec Development Area, Zhengzhou, China | | |
| | Zip code | 450016 | Tel: | +86 371 6798 5313 |
| Evaluation method | Standard method | / | Non-standard method | / |
| | Customized method | / | Other method | / |
| A statement for evaluating uncertainty in measurement | / | | | |
| Evaluation and explanation | According to the requirement of "Quality control database cooperative construction for Autof ms1000 automated mass spectrometry microbial identification system" technical service agreement. Evaluate the conformance of Autof ms1000 identification results to the name of ATCC international standard strains | | | |
| Other explanation | / | | | |

No. SCCL PG2017 No.6

Summary of evaluation results:

| No. | Evaluation object | Standard request | Measured results | Conclusion | Operator | Note |
|-----|--|--|--|--|----------|------|
| 1 | Appearance and specification | Autof ms1000 user manual 1.9 Precautions and safety signs 1.12 System specifications and features 3.4 Target slide in/out 3.5 Operation flow 4.1 Software | 1. The appearance design meets the general safety standards 2. The volume and gross weight of the instrument are convenient to install and operate in laboratory 3. The average time cost from target slide put inside to identification last for only 44s, suit for emergency cases. 4. One single software can make sample edit, spectrum acquisition and identification, etc. easy to operate | Autof ms1000 meets the standard requirements | Ge Ping | / |
| 2 | Identification accuracy with ATCC International standard strains | The experiments were about the identification conformance test with 172 ATCC international standard strains. 1. Operational requirements: All samples need pure culture by agar plate and prepared by using Formic Acid Extraction Method for MALDI TOF mass spectrometry (MS) identification. Each sample will be transferred to 3 individual wells on the target slide and identified by the MALDI TOF MS system 2. Meaning of score values by Autof ms1000: [9.500—10.000]: Reliable Species identification | 1. Autof ms1000 got identification conformance rate 97.67% (168/172, including 3 difficult to distinguish strains by MALDI TOF MS method and 1 fault identification) based on the 172 ATCC international standard strains. 2. Except for <i>Burkholderia cepacia</i> ATCC25608, <i>Shigella boydii</i> ATCC9207, <i>Streptococcus mitis</i> ATCC6249, the 3 strains acknowledged as difficult to distinguish by MALDI TOF MS method, the identification | The identification accuracy of Autof ms1000 is 99.41% based on the identified 169 ATCC international standard strains. | Ge Ping | / |

| | | | | | | |
|---|---|--|---|---|---------|---|
| | | <p>[9.000—9.500]: Secure Genus identification, probable Species identification</p> <p>[6.000—9.000]: Probable Genus identification</p> <p>[0.000—6.000]: Not reliable identification</p> <p>3. Accuracy (%)= the quantity of accurate identified isolates/ total identified isolates * 100%</p> <p>Note: If the 3 test of one isolate got same identification name, select the highest score. If the 3 test of one isolate got different identification name, mark it as fault identification.</p> | <p>conformance rate of Autof ms1000 is 99.41% (168/169)</p> <p>3. Unconformity results detail: <i>Burkholderia cepacia</i> ATCC25608 was identified to <i>Burkholderia cenocepacia</i>, <i>Shigella boydii</i> ATCC9207 was identified to <i>Escherichia coli</i> and <i>Streptococcus mitis</i> ATCC6249 was identified to <i>Streptococcus oralis</i></p> <p>4. Fault identification detail: <i>Lysinibacillus sphaericus</i> was incorrectly identified to <i>Lysinibacillus fusiformis</i>. This isolate then re-identified by 16s rRNA gene sequencing, but only result to <i>Lysinibacillus</i> genus.</p> <p>Note: See detail identification results by Autof ms1000 at Annex 1.</p> | | | |
| 3 | Identification accuracy with clinic samples | <p>The experiments were about the identification conformance test with 176 clinic isolates. All samples need pure culture by agar plate and prepared by using Formic Acid Extraction Method for MALDI TOF MS identification. Each sample will be transferred to 3 individual wells on the target slide and identified by the MALDI TOF MS system</p> <p>1. Perform identification on</p> | <p>1. Autof ms1000 got identification conformance rate 100% based on the 176 clinic isolates.</p> <p>2. The identification conformance rate for the 99 <i>Enterobacteriaceae</i> bacteria in this experimental was 100% and scores were above 9.5</p> | The identification accuracy of Autof ms1000 is 100% based on the identified 176 clinic strains. | Ge ping | / |

| | | | | | | |
|---|------------------------------|--|---|---|---------|---|
| | | <p>Autof ms1000 MALD TOF MS according to its SOP suggested in user manual and confirm by other MALDI TOF MS system according to their SOP.</p> <p>2. Accuracy (%)= the quantity of accurate identified isolates / total identified isolates * 100%</p> <p>Note: If the 3 test of one isolate got same identification name, select the highest score. If the 3 test of one isolate got different identification name, mark it as fault identification.</p> | Note: See identification result details by Autof ms1000 at Annex 2. | | | |
| 4 | Identification repeatability | <p>There were 65 strains including 49 ATCC International standard strains and 16 clinic strains have been test in this experimental.</p> <p>1. Operational requirements: All samples need pure culture by agar plate and prepared by using Formic Acid Extraction Method for MALDI TOF MS identification. Each sample will be transferred to 3 individual wells on the target slide and identified by the MALDI TOF MS system. Repeat the test for 3 days.</p> <p>2. Result determination: Conformance comparison of the identification results of the repeated 3 days</p> | <p>Repeat the same test for 3 days and Autof ms1000 always provide the same identification results and all the scores were above 9.0</p> <p>Note: See identification result details by Autof ms1000 at Annex 3.</p> | The identification repeatability of Autof ms1000 MALDI TOF MS system was 100% based on the 65 identified isolates | Ge ping | / |

Annex 1: Identification results of ATCC international standard strains (172 strains)

| No | Experimental strain | | | Experimental result | |
|----|---------------------|--------------|---|--|-------|
| | ATCC number | Chinese name | Latin name | Autof ms1000 | |
| | | | | Identification result | Score |
| 1 | 19002 | 溶血不动杆菌 | <i>Acinetobacter haemolyticus</i> | <i>Acinetobacter haemolyticus</i> | 9.663 |
| 2 | 17925 | 洛菲不动杆菌 | <i>Acinetobacter lwoffii</i> | <i>Acinetobacter lwoffii</i> | 9.583 |
| 3 | 49139 | 鲍曼不动杆菌 | <i>Acinetobacter baumannii</i> | <i>Acinetobacter baumannii</i> | 9.601 |
| 4 | 49140 | 亲水气单胞菌 | <i>Aeromonas hydrophila</i> | <i>Aeromonas hydrophila</i> | 9.661 |
| 5 | 19415 | 嗜沫嗜血杆菌 | <i>Aggregatibacter aphrophilus</i> | <i>Aggregatibacter aphrophilus</i> | 9.535 |
| 6 | 33389 | 嗜沫嗜血杆菌 | <i>Aggregatibacter aphrophilus</i> | <i>Aggregatibacter aphrophilus</i> | 9.493 |
| 7 | 49146 | 嗜沫嗜血杆菌 | <i>Aggregatibacter aphrophilus</i> | <i>Aggregatibacter aphrophilus</i> | 9.655 |
| 8 | 49917 | 嗜沫杆菌 | <i>Aggregatibacter aphrophilus</i> | <i>Aggregatibacter aphrophilus</i> | 9.215 |
| 9 | 35655 | 粪产碱杆菌 | <i>Alcaligenes faecalis</i> subsp. <i>faecalis</i> | <i>Alcaligenes faecalis</i> | 9.676 |
| 10 | 11376 | 解硫酸素杆菌 | <i>Aneurinibacillus aneurinolyticus</i> | <i>Aneurinibacillus aneurinolyticus</i> | 9.601 |
| 11 | BAA-1784 | 溶血隐秘杆菌 | <i>Arcanobacterium haemolyticum</i> | <i>Arcanobacterium haemolyticum</i> | 9.633 |
| 12 | CMCC63303 | 腊样芽胞杆菌 | <i>Bacillus cereus</i> | <i>Bacillus cereus</i> | 9.529 |
| 13 | CMCC63501 | 枯草芽胞杆菌 | <i>Bacillus subtilis</i> | <i>Bacillus subtilis</i> | 9.550 |
| 14 | 23745 | 脆弱拟杆菌 | <i>Bacteroides fragilis</i> | <i>Bacteroides fragilis</i> | 9.762 |
| 15 | 8503 | 吉氏拟杆菌 | <i>Bacteroides macerans</i> | <i>Parabacteroides distasonis</i> | 9.714 |
| 16 | BAA-1296 | 卵园拟杆菌 | <i>Bacteroides ovatus</i> | <i>Bacteroides ovatus</i> | 9.609 |
| 17 | 10580 | 支气管炎博德特菌 | <i>Bordetella bronchiseptica</i> | <i>Bordetella bronchiseptica</i> | 9.777 |
| 18 | 51663 | 土壤短小芽孢杆菌 | <i>Brevibacillus agri</i> | <i>Brevibacillus agri</i> | 9.842 |
| 19 | 25608 | 洋葱伯克霍尔德 | <i>Burkholderia cepacia</i> | <i>Burkholderia cenocepacia</i> | 9.568 |
| 20 | 14053 | 白色念珠菌 | <i>Candida albicans</i> | <i>Candida albicans</i> | 9.604 |
| 21 | 18804 | 白色念珠菌 | <i>Candida albicans</i> | <i>Candida albicans</i> | 9.542 |
| 22 | 26790 | 白色念珠菌 | <i>Candida albicans</i> | <i>Candida albicans</i> | 9.501 |
| 23 | 60193 | 白色念珠菌 | <i>Candida albicans</i> | <i>Candida albicans</i> | 9.544 |
| 24 | 66027 | 白色念珠菌 | <i>Candida albicans</i> | <i>Candida albicans</i> | 9.569 |
| 25 | 2001 | 光滑念珠菌 | <i>Candida glabrata</i> | <i>Candida glabrata</i> | 9.703 |
| 26 | 15545 | 光滑念珠菌 | <i>Candida glabrata</i> | <i>Candida glabrata</i> | 9.547 |
| 27 | 64677 | 光滑念珠菌 | <i>Candida glabrata</i> | <i>Candida glabrata</i> | 9.674 |
| 28 | 66032 | 光滑念珠菌 | <i>Candida glabrata</i> | <i>Candida glabrata</i> | 9.585 |
| 29 | MYA-2950 | 光滑念珠菌 | <i>Candida glabrata</i> | <i>Candida glabrata</i> | 9.630 |
| 30 | 2512 | 高加索乳酒念珠菌 | <i>Candida kefyr</i> | <i>Candida kefyr</i> (<i>Kluyveromyces marxianus</i>) | 9.539 |
| 31 | 66028 | 乳酒念珠菌 | <i>Candida kefyr</i> | <i>Candida kefyr</i> (<i>Kluyveromyces marxianus</i>) | 9.641 |
| 32 | 66029 | 热带念珠菌 | <i>Candida tropicalis</i> | <i>Candida tropicalis</i> | 9.385 |

Annex 1: Identification results of ATCC international standard strains (172 strains)

| No | Experimental strain | | | Experimental result | |
|----|---------------------|--------------|--|--|-------|
| | ATCC number | Chinese name | Latin name | Autof ms1000 | |
| | | | | Identification result | Score |
| 33 | 201380 | 热带念珠菌 | <i>Candida tropicalis</i> | <i>Candida tropicalis</i> | 9.502 |
| 34 | 14900 | 人心杆菌 | <i>Cardiobacterium hominis</i> | <i>Cardiobacterium hominis</i> | 9.509 |
| 35 | 8090 | 弗劳地枸橼酸杆菌 | <i>Citrobacter freundii</i> | <i>Citrobacter freundii</i> | 9.723 |
| 36 | 12464 | 败毒梭菌 | <i>Clostridium septicum</i> | <i>Clostridium septicum</i> | 9.796 |
| 37 | BAA-1293 | 纹带棒杆菌 | <i>Corynebacterium striatum</i> | <i>Corynebacterium striatum</i> | 9.623 |
| 38 | 43044 | 解脲棒杆菌 | <i>Corynebacterium urealyticum</i> | <i>Corynebacterium urealyticum</i> | 9.580 |
| 39 | 34140 | 浅白隐球菌 | <i>Cryptococcus albidus</i> | <i>Cryptococcus albidus</i> | 9.526 |
| 40 | 66033 | 指甲隐球菌 | <i>Cryptococcus uniguttulatus</i> | <i>Cryptococcus uniguttulatus</i> (<i>Filobasidium uniguttulatum</i>) | 9.501 |
| 41 | 9949 | 土生隐球菌 | <i>Cryptococcus humicola</i> | <i>Cryptococcus humicola</i> | 9.522 |
| 42 | 64676 | 土生隐球菌 | <i>Cryptococcus humicola</i> | <i>Cryptococcus humicola</i> | 9.538 |
| 43 | 66036 | 劳伦隐球菌 | <i>Cryptococcus laurentii</i> | <i>Cryptococcus laurentii</i> | 9.645 |
| 44 | 13690 | 新型隐球菌 | <i>Cryptococcus neoformans</i> | <i>Cryptococcus neoformans</i> | 9.283 |
| 45 | 66031 | 新生隐球菌 | <i>Cryptococcus neoformans</i> | <i>Cryptococcus neoformans</i> | 9.159 |
| 46 | 66030 | 浅白隐球菌 | <i>Cryptococcus albidus</i> | <i>Cryptococcus albidus</i> | 9.599 |
| 47 | BAA-1152 | 嗜蚀艾肯菌 | <i>Eikenella corrodens</i> | <i>Eikenella corrodens</i> | 9.524 |
| 48 | 11576 | 耐久肠球菌 | <i>Enterococcus durans</i> | <i>Enterococcus durans</i> | 9.639 |
| 49 | 49533 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.731 |
| 50 | 35667 | 屎肠球菌 | <i>Enterococcus faecium</i> | <i>Enterococcus faecium</i> | 9.743 |
| 51 | 10541 | 空肠肠球菌 | <i>Enterococcus hirae</i> | <i>Enterococcus hirae</i> | 9.674 |
| 52 | 8739 | 大肠埃希菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.679 |
| 53 | 28576 | 头状地霉菌 | <i>Geotrichum capitatum</i> | <i>Magnusiomyces capitatus</i> | 9.573 |
| 54 | 33940 | 杜克雷嗜血杆菌 | <i>Haemophilus ducreyi</i> | <i>Haemophilus ducreyi</i> | 9.399 |
| 55 | 9006 | 流感嗜血杆菌 | <i>Haemophilus influenzae</i> | <i>Haemophilus influenzae</i> | 9.555 |
| 56 | 9007 | 流感嗜血杆菌 | <i>Haemophilus influenzae</i> | <i>Haemophilus influenzae</i> | 9.717 |
| 57 | 19418 | 流感嗜血杆菌 | <i>Haemophilus influenzae</i> | <i>Haemophilus influenzae</i> | 9.802 |
| 58 | 49766 | 流感嗜血杆菌 | <i>Haemophilus influenzae</i> | <i>Haemophilus influenzae</i> | 9.813 |
| 59 | 23330 | 金氏金氏菌 | <i>Kingella kingae</i> | <i>Kingella kingae</i> | 9.742 |
| 60 | 43863 | 产酸克雷伯菌 | <i>Klebsiella oxytoca</i> | <i>Klebsiella oxytoca</i> | 9.771 |
| 61 | BAA-1706 | 肺炎克雷伯菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.676 |
| 62 | 27736 | 肺炎克雷伯菌 | <i>Klebsiella pneumoniae</i> <i>subsp. Pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.673 |
| 63 | BAA-752 | 克氏库克菌 | <i>Kocuria kristinae</i> | <i>Kocuria kristinae</i> | 9.680 |
| 64 | 25401 | 格氏李斯特菌 | <i>Listeria grayi</i> | <i>Listeria grayi</i> | 9.588 |
| 65 | BAA-751 | 单核细胞增生李斯 | <i>Listeria monocytogenes</i> | <i>Listeria monocytogenes</i> | 9.692 |

Annex 1: Identification results of ATCC international standard strains (172 strains)

| No | Experimental strain | | | Experimental result | |
|----|---------------------|--------------|--|---|-------|
| | ATCC number | Chinese name | Latin name | Autof ms1000 | |
| | | | | Identification result | Score |
| | | 特菌 | | | |
| 66 | 35967 | 斯氏李斯特菌 | <i>Listeria seeligeri</i> | <i>Listeria seeligeri</i> | 9.506 |
| 67 | 35897 | 威氏李斯特菌 | <i>Listeria welshimeri</i> | <i>Listeria welshimeri</i> | 9.634 |
| 68 | 4525 | 球形芽孢杆菌 | <i>Lysinibacillus sphaericus</i> | <i>Lysinibacillus fusiformis</i> | 9.567 |
| 69 | 49732 | 滕黄微球菌 | <i>Micrococcus luteus</i> | <i>Micrococcus luteus</i> | 9.630 |
| 70 | 49143 | 卡他莫拉菌 | <i>Moraxella catarrhalis</i> | <i>Moraxella sg Branhamella catarrhalis</i> | 9.686 |
| 71 | 25829 | 摩根摩根菌 | <i>Morganella morganii subsp. Morganii</i> | <i>Morganella morganii</i> | 9.639 |
| 72 | 13950 | 胞内分枝杆菌 | <i>Mycobacterium intracellulare</i> | <i>Mycobacterium intracellulare</i> | 9.602 |
| 73 | 31426 | 淋病奈瑟氏菌 | <i>Neisseria gonorrhoeae</i> | <i>Neisseria gonorrhoeae</i> | 9.606 |
| 74 | 23970 | 乳糖奈瑟菌 | <i>Neisseria lactamica</i> | <i>Neisseria lactamica</i> | 9.557 |
| 75 | 13090 | 脑膜炎奈瑟菌 | <i>Neisseria meningitidis</i> | <i>Neisseria meningitidis</i> | 9.637 |
| 76 | 13102 | 脑膜炎奈瑟菌 | <i>Neisseria meningitidis</i> | <i>Neisseria meningitidis</i> | 9.643 |
| 77 | 19247 | 星型诺卡菌 | <i>Nocardia asteroides</i> | <i>Nocardia asteroides</i> | 9.578 |
| 78 | 3308 | 鼻疽诺卡菌 | <i>Nocardia farcinica</i> | <i>Nocardia farcinica</i> | 9.604 |
| 79 | 49687 | 人苍白杆菌 | <i>Ochrobactrum anthropi</i> | <i>Ochrobactrum anthropi</i> | 9.602 |
| 80 | BAA-749 | 人苍白杆菌 | <i>Ochrobactrum anthropi</i> | <i>Ochrobactrum anthropi</i> | 9.763 |
| 81 | 8509 | 浸麻类芽孢杆菌 | <i>Paenibacillus macerans</i> | <i>Paenibacillus macerans</i> | 9.546 |
| 82 | 7070 | 多粘类芽孢杆菌 | <i>Paenibacillus polymyxa</i> | <i>Paenibacillus polymyxa</i> | 9.680 |
| 83 | BAA-1295 | 吉氏拟杆菌 | <i>Parabacteroides distasonis</i> | <i>Parabacteroides distasonis</i> | 9.745 |
| 84 | 51903 | 类志贺气单胞菌 | <i>Plesiomonas shigelloides</i> | <i>Plesiomonas shigelloides</i> | 9.737 |
| 85 | 15032 | 中间普雷沃菌 | <i>Prevotella intermedia</i> | <i>Prevotella intermedia</i> | 9.549 |
| 86 | 15930 | 洛氏普雷沃菌 | <i>Prevotella loescheii</i> | <i>Prevotella loescheii</i> | 9.643 |
| 87 | 25845 | 产黑色素普雷沃菌 | <i>Prevotella melaninogenica</i> | <i>Prevotella melaninogenica</i> | 9.532 |
| 88 | 11827 | 痤疮丙酸杆菌 | <i>Propionibacterium acnes</i> | <i>Propionibacterium acnes</i> | 9.560 |
| 89 | 13315 | 豪氏变形杆菌 | <i>Proteus hauseri</i> | <i>Proteus hauseri</i> | 9.709 |
| 90 | 7002 | 奇异变形杆菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.709 |
| 91 | 6380 | 普通变形杆菌 | <i>Proteus vulgaris</i> | <i>Proteus vulgaris</i> | 9.790 |
| 92 | 51902 | 产碱普罗威登斯菌 | <i>Providencia alcalifaciens</i> | <i>Providencia alcalifaciens</i> | 9.726 |
| 93 | 33672 | 司徒普罗维登菌 | <i>Providencia stuartii</i> | <i>Providencia stuartii</i> | 9.685 |
| 94 | BAA-1744 | 铜绿假单胞菌 | <i>Pseudomonas aeruginosa</i> | <i>Pseudomonas aeruginosa</i> | 9.636 |
| 95 | 49129 | 隐秘罗尔斯顿菌 | <i>Ralstonia insidiosa</i> | <i>Ralstonia insidiosa</i> | 9.582 |
| 96 | 9150 | 甲型副伤寒沙门菌 | <i>Salmonella enterica subsp. Enterica</i> | <i>Salmonella sp</i> | 9.568 |
| 97 | 8100 | 粘质沙雷菌 | <i>Serratia marcescens</i> | <i>Serratia marcescens</i> | 9.633 |

Annex 1: Identification results of ATCC international standard strains (172 strains)

| No | Experimental strain | | | Experimental result | |
|-----|---------------------|--------------|--|---|-------|
| | ATCC number | Chinese name | Latin name | Autof ms1000 | |
| | | | | Identification result | Score |
| 98 | 33670 | 深红沙雷菌 | <i>Serratia rubidaea</i> | <i>Serratia rubidaea</i> | 9.634 |
| 99 | 49138 | 腐败假单胞菌 | <i>Shewanella haliotis</i> | <i>Shewanella putrefaciens</i> | 9.480 |
| 100 | 9207 | 鲍氏志贺菌 | <i>Shigella boydii</i> | <i>Escherichia coli</i> | 9.702 |
| 101 | 35656 | 多食鞘氨醇杆菌 | <i>Sphingobacterium multivorum</i> | <i>Sphingobacterium multivorum</i> | 9.590 |
| 102 | MYA-4550 | 鲑色掷孢酵母 | <i>Sporobolomyces salmonicolor</i> | <i>Sporobolomyces salmonicolor</i> (<i>Sporidiobolus salmonicolor</i>) | 9.046 |
| 103 | BAA-1026 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> | <i>Staphylococcus aureus</i> | 9.695 |
| 104 | 49476 | 葡菌金葡亚种 | <i>Staphylococcus aureus</i> subsp. <i>Aureus</i> | <i>Staphylococcus aureus</i> | 9.716 |
| 105 | 43300 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> subsp. <i>Aureus</i> | <i>Staphylococcus aureus</i> | 9.598 |
| 106 | 35661 | 头状葡萄球菌 | <i>Staphylococcus capitis</i> subsp. <i>Capitis</i> | <i>Staphylococcus capitis</i> | 9.596 |
| 107 | 49134 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.597 |
| 108 | 700403 | 缓慢葡萄球菌 | <i>Staphylococcus lentus</i> | <i>Staphylococcus lentus</i> | 9.634 |
| 109 | BAA-750 | 腐生葡萄球菌 | <i>Staphylococcus saprophyticus</i> | <i>Staphylococcus saprophyticus</i> | 9.572 |
| 110 | 29061 | 松鼠葡萄球菌 | <i>Staphylococcus sciuri</i> ssp. <i>Sciuri</i> | <i>Staphylococcus sciuri</i> | 9.436 |
| 111 | 35033 | 木糖葡萄球菌 | <i>Staphylococcus xylosus</i> | <i>Staphylococcus xylosus</i> | 9.576 |
| 112 | 700404 | 木糖葡萄球菌 | <i>Staphylococcus xylosus</i> | <i>Staphylococcus xylosus</i> | 9.611 |
| 113 | 51331 | 嗜麦芽窄食单胞菌 | <i>Stenotrophomonas maltophilia</i> | <i>Stenotrophomonas maltophilia</i> | 9.654 |
| 114 | 12388 | 停乳链球菌 | <i>Streptococcus dysgalactiae</i> | <i>Streptococcus dysgalactiae</i> | 9.703 |
| 115 | 9528 | 马链球菌动物传染病亚种 | <i>Streptococcus equi</i> subsp. <i>Equi</i> | <i>Streptococcus equi</i> | 9.749 |
| 116 | 700400 | 马链球菌兽疫亚种 | <i>Streptococcus equi</i> subsp. <i>Zooepidemicus</i> | <i>Streptococcus equi</i> | 9.606 |
| 117 | 9809 | 解没食子酸链球菌 | <i>Streptococcus gallolyticus</i> | <i>Streptococcus gallolyticus</i> | 9.503 |
| 118 | 49147 | 解没食子酸链球菌(牛链) | <i>Streptococcus gallolyticus</i> | <i>Streptococcus gallolyticus</i> | 9.637 |
| 119 | 49475 | 解没食子酸链球菌 | <i>Streptococcus gallolyticus</i> subsp. <i>Gallolyticus</i> | <i>Streptococcus gallolyticus</i> | 9.644 |
| 120 | 25175 | 变异链球菌 | <i>Streptococcus mutans</i> | <i>Streptococcus mutans</i> | 9.482 |
| 121 | 49136 | 肺炎链球菌 | <i>Streptococcus pneumoniae</i> | <i>Streptococcus pneumoniae</i> | 9.610 |
| 122 | 12392 | F 群链球菌 | <i>Streptococcus species</i> | <i>Streptococcus constellatus</i> | 9.683 |

Annex 1: Identification results of ATCC international standard strains (172 strains)

| No | Experimental strain | | | Experimental result | |
|-----|---------------------|--------------|--------------------------------------|---|-------|
| | ATCC number | Chinese name | Latin name | Autof ms1000 | |
| | | | | Identification result | Score |
| 123 | 700407 | 乳房链球菌 | <i>Streptococcus uberis</i> | <i>Streptococcus uberis</i> | 9.633 |
| 124 | 204094 | 粘状毛孢子菌 | <i>Trichosporon mucoides</i> | <i>Trichosporon mucoides</i> | 9.655 |
| 125 | 10790 | 小伟荣球菌 | <i>Veillonella parvula</i> | <i>Veillonella parvula</i> | 9.716 |
| 126 | 9773 | 解脂耶氏酵母 | <i>Yarrowia lipolytica</i> | <i>Candida lipolytica</i> (<i>Yarrowia lipolytica</i>) | 9.617 |
| 127 | 23715 | 小肠结肠炎耶尔森氏菌 | <i>yersinia enterocolitica</i> | <i>Yersinia enterocolitica</i> | 9.701 |
| 128 | 33639 | 克氏耶尔森菌 | <i>Yersinia kristensenii</i> | <i>Yersinia kristensenii</i> | 9.737 |
| 129 | 49619 | 肺炎链球菌 | <i>Streptococcus pneumoniae</i> | <i>Streptococcus pneumoniae</i> | 9.692 |
| 130 | 8482 | 普通拟杆菌 | <i>Bacteroides vulgatus</i> | <i>Bacteroides vulgatus</i> | 9.582 |
| 131 | 9714 | 索氏梭菌 | <i>Clostridium sordellii</i> | <i>Clostridium sordellii</i> | 9.553 |
| 132 | 19401 | 溶组织梭菌 | <i>Clostridium histolyticum</i> | <i>Clostridium histolyticum</i> | 9.287 |
| 133 | 19404 | 生胞梭菌 | <i>Clostridium sporogenes</i> | <i>Clostridium sporogenes</i> | 9.765 |
| 134 | 700406 | 浅绿气球菌 | <i>Aerococcus viridans</i> | <i>Aerococcus viridans</i> | 9.540 |
| 135 | 25788 | 铅黄肠球菌 | <i>Enterococcus casseliflavus</i> | <i>Enterococcus casseliflavus</i> | 9.755 |
| 136 | 19414 | 猪红斑丹毒丝菌 | <i>Erysipelothrix rhusiopathiae</i> | <i>Erysipelothrix rhusiopathiae</i> | 9.643 |
| 137 | 10556 | 血链球菌 | <i>Streptococcus sanguinis</i> | <i>Streptococcus sanguinis</i> | 9.575 |
| 138 | 6249 | 缓症链球菌 | <i>Streptococcus mitis</i> | <i>Streptococcus oralis</i> | 9.687 |
| 139 | 9811 | 口腔链球菌 | <i>Streptococcus oralis</i> | <i>Streptococcus oralis</i> | 9.682 |
| 140 | 9766 | 流感嗜血杆菌 | <i>Haemophilus influenzae</i> | <i>Haemophilus influenzae</i> | 9.775 |
| 141 | 9247 | 流感嗜血杆菌 | <i>Haemophilus influenzae</i> | <i>Haemophilus influenzae</i> | 9.778 |
| 142 | 6258 | 克柔念珠菌 | <i>Candida krusei</i> | <i>Candida krusei</i> | 9.630 |
| 143 | 9689 | 艰难梭菌 | <i>Clostridium difficile</i> | <i>Clostridium difficile</i> | 9.717 |
| 144 | 27337 | 厌氧消化链球菌 | <i>Peptostreptococcus anaerobius</i> | <i>Peptostreptococcus anaerobius</i> | 9.620 |
| 145 | 33387 | 解脲拟杆菌 | <i>Campylobacter ureolyticus</i> | <i>Campylobacter ureolyticus</i> | 9.334 |
| 146 | 35218 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.751 |
| 147 | 27853 | 铜绿假单胞菌 | <i>Pseudomonas aeruginosa</i> | <i>Pseudomonas aeruginosa</i> | 9.728 |
| 148 | 25922 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.744 |
| 149 | 29212 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.768 |
| 150 | 29213 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> | <i>Staphylococcus aureus</i> | 9.743 |
| 151 | 4513 | 环状芽孢杆菌 | <i>Bacillus circulans</i> | <i>Bacillus circulans</i> | 9.559 |
| 152 | 10876 | 蜡样芽孢杆菌 | <i>Bacillus cereus</i> | <i>Bacillus cereus</i> | 9.720 |
| 153 | 14580 | 地衣芽孢杆菌 | <i>Bacillus licheniformis</i> | <i>Bacillus licheniformis</i> | 9.559 |
| 154 | 14884 | 短芽孢杆菌 | <i>Bacillus pumilus</i> | <i>Bacillus pumilus</i> | 9.144 |
| 155 | 35098 | 四联厌氧球菌 | <i>Anaerococcus tetradius</i> | <i>Anaerococcus tetradius</i> | 9.691 |
| 156 | 15987 | 黏放线菌 | <i>Actinomyces viscosus</i> | <i>Actinomyces viscosus</i> | 9.522 |

Annex 1: Identification results of ATCC international standard strains (172 strains)

| No | Experimental strain | | | Experimental result | |
|-----|---------------------|--------------|--|--|-------|
| | ATCC number | Chinese name | Latin name | Autof ms1000 | |
| | | | | Identification result | Score |
| 157 | 27731 | 黑色消化球菌 | <i>Peptococcus niger</i> | <i>Peptococcus niger</i> | 9.605 |
| 158 | 27090 | 胸膜肺炎放线杆菌 | <i>Actinobacillus pleuropneumoniae</i> | <i>Actinobacillus pleuropneumoniae</i> | 9.270 |
| 159 | 29427 | 产吡啶消化链球菌 | <i>Peptoniphilus indolicus</i> | <i>Peptoniphilus indolicus</i> | 9.584 |
| 160 | 17743 | 齿啮韦荣氏菌 | <i>Veillonella denticariosi</i> | <i>Veillonella denticariosi</i> | 9.242 |
| 161 | 15752 | 龟分枝杆菌 | <i>Mycobacterium chelonae</i> | <i>Mycobacterium chelonae</i> | 8.480 |
| 162 | 10379 | 溶血孪生球菌 | <i>Gemella haemolysans</i> | <i>Gemella haemolysans</i> | 9.541 |
| 163 | 55044 | 产碱假单胞菌 | <i>Pseudomonas alcaligenes</i> | <i>Pseudomonas alcaligenes</i> | 9.596 |
| 164 | 9345 | 溶血隐秘杆菌 | <i>Arcanobacterium haemolyticum</i> | <i>Arcanobacterium haemolyticum</i> | 9.673 |
| 165 | 11996 | 睾丸酮丛毛单胞菌 | <i>Comamonas testosterone</i> | <i>Comamonas testosterone</i> | 9.580 |
| 166 | 12472 | 紫色杆菌 | <i>Chromobacterium violaceum</i> | <i>Chromobacterium violaceum</i> | 9.176 |
| 167 | 13337 | 蜂房哈夫尼亚菌 | <i>Hafnia alvei</i> | <i>Hafnia alvei</i> | 9.628 |
| 168 | 29328 | 大芬戈尔德菌 | <i>Fingoldia magna</i> | <i>Fingoldia magna</i> | 9.371 |
| 169 | 25586 | 具核梭杆菌 | <i>Fusoacterium nucleatum</i> | <i>Fusoacterium nucleatum</i> | 9.668 |
| 170 | 35418 | 化脓拟杆菌 | <i>Bacteroides pyogenes</i> | <i>Bacteroides pyogenes</i> | 9.694 |
| 171 | 49943 | 空肠弯曲菌 | <i>Campylobacter jejuni</i> | <i>Campylobacter jejuni</i> | 9.190 |
| 172 | 23684 | 迟缓爱德华菌 | <i>Edwardsiella tarda</i> | <i>Edwardsiella tarda</i> | 9.683 |

Evaluation statistics:

The microorganism identification consistency test have taken 172 ATCC international standard strains covering 133 species into account, containing Gram-Negative/Positive bacteria, Aerobic bacteria, Anaerobic bacteria and Fastidious bacteria, Yeast and Nontuberculosis mycobacteria. The identification results were summarized as below:

Table 1 Identification accuracy of ATCC international standard strains

| Microbe type | Autof ms1000 | | | |
|------------------------------|--------------|-----------|-----------|--------------|
| | Good result | | No result | Fault result |
| | [9.5-10) | [9.0-9.5) | [6.0-9.0) | [0-6.0) |
| Aerobic Gram+ bacteria | 53 | 3 | | 2 |
| Aerobic Gram- bacteria | 52 | 6 | | 2 |
| Anaerobic Gram+ bacteria | 9 | 3 | | |
| Anaerobic Gram- bacteria | 11 | 2 | | |
| Yeast | 23 | 4 | | |
| Nontuberculosis Mycobacteria | 1 | | 1 | |
| Total | 149 | 18 | 1 | 4 |
| Accuracy (%) | 97.67% | | 0 | 2.33% |

Table 2 Unconformity identification results detail

| Microbe type | | | Autof ms1000 | |
|--------------|--------------|----------------------------------|----------------------------------|-------|
| ATCC number | Chinese name | Latin name | Identification result | Score |
| 25608 | 洋葱伯克霍尔德 | <i>Burkholderia cepacia</i> | <i>Burkholderia cenocepacia</i> | 9.568 |
| 9207 | 鲍氏志贺菌 | <i>Shigella boydii</i> | <i>Escherichia coli</i> | 9.702 |
| 6249 | 缓症链球菌 | <i>Streptococcus mitis</i> | <i>Streptococcus oralis</i> | 9.687 |
| 4525 | 球形芽孢杆菌 | <i>Lysinibacillus sphaericus</i> | <i>Lysinibacillus fusiformis</i> | 9.567 |

It can be seen from the tables that the identification accuracy of Autof ms1000 is 97.67% for the 172 ATCC international standard strains.

Among all the 4 unconformity identifies, 3 of them were acknowledged as difficult to distinguish strains by MALDI TOF mass spectrometry technology. As for *Lysinibacillus sphaericus* (ATCC 4525), the reliable species name could not be determined even by 16s rRNA gene sequencing which only identified to Genus level, so we temporarily see ATCC name as its correct species name. In this case, the identification conformance of Autof ms1000 is 99.41% (these species acknowledged as difficult to distinguish by MALDI-TOF MS technology *Burkholderia cepacia* ATCC 25608, *Shigella boydii* ATCC 9207, *Streptococcus mitis* ATCC 6249 were not excluded in this statistics)

(Note: *Salmonella enterica subsp. Enterica* ATCC 9150 was identified to *Salmonella* sp. *Streptococcus species* ATCC 12392 was identified to *Streptococcus constellatus*, they were seen as correct identification)

This experimental results show Autof ms1000 got very high identification accuracy (99.41%) based on the 169 ATCC international standard strains.

Annex 2: Identification results of Clinic strains (176 strains)

| No. | Experimental strain | | | Identification result Autof ms1000 | |
|-----|---------------------|--------------|-------------------------------------|---------------------------------------|-------|
| | Sample number | Chinese name | Latin name | Identification result | Score |
| 1 | H2 | 白色念珠菌 | <i>Candida albicans</i> | <i>Candida albicans</i> | 9.557 |
| 2 | H5 | 脑膜炎奈瑟氏菌 | <i>Neisseria meningitidis</i> | <i>Neisseria meningitidis</i> | 9.763 |
| 3 | H6 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.674 |
| 4 | H7 | 鲍曼不动杆菌 | <i>Acinetobacter baumannii</i> | <i>Acinetobacter baumannii</i> | 9.661 |
| 5 | H8 | 无乳链球菌 | <i>Streptococcus agalactiae</i> | <i>Streptococcus agalactiae</i> | 9.778 |
| 6 | H9 | 溶血葡萄球菌 | <i>Staphylococcus haemolyticus</i> | <i>Staphylococcus haemolyticus</i> | 9.660 |
| 7 | H10 | 科氏葡萄球菌 | <i>Staphylococcus cohnii</i> | <i>Staphylococcus cohnii</i> | 9.168 |
| 8 | H11 | 皮氏葡萄球菌 | <i>Staphylococcus pettenkoferi</i> | <i>Staphylococcus pettenkoferi</i> | 9.556 |
| 9 | H12 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> | <i>Staphylococcus aureus</i> | 9.606 |
| 10 | H13 | 松鼠葡萄球菌 | <i>Staphylococcus sciuri</i> | <i>Staphylococcus sciuri</i> | 9.515 |
| 11 | H14 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.715 |
| 12 | H15 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.711 |
| 13 | H16 | 产气肠杆菌 | <i>Enterobacter aerogenes</i> | <i>Enterobacter aerogenes</i> | 9.715 |
| 14 | H17 | 粘质沙雷菌 | <i>Serratia marcescens</i> | <i>Serratia marcescens</i> | 9.605 |
| 15 | H18 | 斯氏普罗威登氏菌 | <i>Providencia stuartii</i> | <i>Providencia stuartii</i> | 9.619 |
| 16 | H19 | 人葡萄球菌 | <i>Staphylococcus hominis</i> | <i>Staphylococcus hominis</i> | 9.700 |
| 17 | H20 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.759 |
| 18 | H21 | 克氏柠檬酸杆菌 | <i>Citrobacter koseri</i> | <i>Citrobacter koseri</i> | 9.682 |
| 19 | H22 | 粪产碱菌 | <i>Alcaligenes faecalis</i> | <i>Alcaligenes faecalis</i> | 9.818 |
| 20 | H23 | 克氏柠檬酸杆菌 | <i>Citrobacter koseri</i> | <i>Citrobacter koseri</i> | 9.746 |
| 21 | H24 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.781 |
| 22 | H25 | 鲍曼不动杆菌 | <i>Acinetobacter baumannii</i> | <i>Acinetobacter baumannii</i> | 9.721 |
| 23 | H26 | 粘质沙雷菌 | <i>Serratia marcescens</i> | <i>Serratia marcescens</i> | 9.555 |
| 24 | H27 | 产硫化物球短链菌 | <i>Globicatella sulfidifaciens</i> | <i>Globicatella sulfidifaciens</i> | 9.559 |
| 25 | H28 | 腐生葡萄球菌 | <i>Staphylococcus saprophyticus</i> | <i>Staphylococcus saprophyticus</i> | 9.637 |
| 26 | H29 | 头葡萄球菌 | <i>Staphylococcus capitis</i> | <i>Staphylococcus capitis</i> | 9.540 |
| 27 | H30 | 头葡萄球菌 | <i>Staphylococcus capitis</i> | <i>Staphylococcus capitis</i> | 9.450 |
| 28 | H31 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.700 |
| 29 | H32 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.545 |
| 30 | H34 | 咽峡炎链球菌 | <i>Streptococcus anginosus</i> | <i>Streptococcus anginosus</i> | 9.552 |
| 31 | H35 | 抗逆棒杆菌 | <i>Corynebacterium resistens</i> | <i>Corynebacterium resistens</i> | 9.475 |
| 32 | H36 | 嗜麦芽寡养单胞菌 | <i>Stenotrophomonas maltophilia</i> | <i>Stenotrophomonas maltophilia</i> | 9.722 |
| 33 | H37 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.703 |
| 34 | H38 | 阴沟肠杆菌 | <i>Enterobacter cloacae</i> | <i>Enterobacter cloacae</i> | 9.591 |
| 35 | H39 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.781 |
| 36 | H40 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.725 |

Annex 2: Identification results of Clinic strains (176 strains)

| No. | Experimental strain | | | Identification result Autof ms1000 | |
|-----|---------------------|--------------|------------------------------------|---------------------------------------|-------|
| | Sample number | Chinese name | Latin name | Identification result | Score |
| 37 | H41 | 都柏林念珠菌 | <i>Candida dubliniensis</i> | <i>Candida dubliniensis</i> | 9.591 |
| 38 | H42 | 纹带棒杆菌 | <i>Corynebacterium striatum</i> | <i>Corynebacterium striatum</i> | 9.774 |
| 39 | H43 | 肠沙门 | <i>Salmonella sp.</i> | <i>Salmonella sp.</i> | 9.712 |
| 40 | H44 | 纹带棒杆菌 | <i>Corynebacterium striatum</i> | <i>Corynebacterium striatum</i> | 9.703 |
| 41 | H47 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.747 |
| 42 | H48 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.689 |
| 43 | H50 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.734 |
| 44 | H51 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.753 |
| 45 | H52 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.744 |
| 46 | H54 | 普通变形菌 | <i>Proteus vulgaris</i> | <i>Proteus vulgaris</i> | 9.685 |
| 47 | H55 | 阪崎肠杆菌 | <i>Cronobacter sakazakii</i> | <i>Cronobacter sakazakii</i> | 9.677 |
| 48 | H57 | 产酸克雷伯氏菌 | <i>Klebsiella oxytoca</i> | <i>Klebsiella oxytoca</i> | 9.653 |
| 49 | H58 | 产气肠杆菌 | <i>Enterobacter aerogenes</i> | <i>Enterobacter aerogenes</i> | 9.685 |
| 50 | H59 | 鲍曼不动杆菌 | <i>Acinetobacter baumannii</i> | <i>Acinetobacter baumannii</i> | 9.691 |
| 51 | H60 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.677 |
| 52 | H62 | 阪崎肠杆菌 | <i>Cronobacter sakazakii</i> | <i>Cronobacter sakazakii</i> | 9.645 |
| 53 | H64 | 停乳链球菌 | <i>Streptococcus dysgalactiae</i> | <i>Streptococcus dysgalactiae</i> | 9.696 |
| 54 | H65 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.605 |
| 55 | H66 | 鲍曼不动杆菌 | <i>Acinetobacter baumannii</i> | <i>Acinetobacter baumannii</i> | 9.629 |
| 56 | H67 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.630 |
| 57 | H68 | 近平滑念珠菌 | <i>Candida parapsilosis</i> | <i>Candida parapsilosis</i> | 9.097 |
| 58 | H69 | 摩根摩根氏菌 | <i>Morganella morganii</i> | <i>Morganella morganii</i> | 9.696 |
| 59 | H70 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.608 |
| 60 | H71 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.694 |
| 61 | H72 | 人葡萄球菌 | <i>Staphylococcus hominis</i> | <i>Staphylococcus hominis</i> | 9.689 |
| 62 | H73 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> | <i>Staphylococcus aureus</i> | 9.715 |
| 63 | H74 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.715 |
| 64 | H75 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.720 |
| 65 | H76 | 停乳链球菌 | <i>Streptococcus dysgalactiae</i> | <i>Streptococcus dysgalactiae</i> | 9.656 |
| 66 | H77 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.777 |
| 67 | H78 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.767 |
| 68 | H79 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.691 |
| 69 | H80 | 头葡萄球菌 | <i>Staphylococcus capitis</i> | <i>Staphylococcus capitis</i> | 9.673 |
| 70 | H81 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.697 |
| 71 | H82 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.590 |
| 72 | H83 | 溶血葡萄球菌 | <i>Staphylococcus haemolyticus</i> | <i>Staphylococcus haemolyticus</i> | 9.653 |
| 73 | H84 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.689 |

Annex 2: Identification results of Clinic strains (176 strains)

| No. | Experimental strain | | | Identification result Autof ms1000 | |
|-----|---------------------|--------------|-----------------------------------|---------------------------------------|-------|
| | Sample number | Chinese name | Latin name | Identification result | Score |
| 74 | H85 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.738 |
| 75 | H86 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.699 |
| 76 | H87 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.676 |
| 77 | H88 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.723 |
| 78 | H89 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.697 |
| 79 | H90 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.523 |
| 80 | H91 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.720 |
| 81 | H92 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.710 |
| 82 | H93 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.684 |
| 83 | H94 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.697 |
| 84 | H95 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.708 |
| 85 | H96 | 头葡萄球菌 | <i>Staphylococcus capitis</i> | <i>Staphylococcus capitis</i> | 9.553 |
| 86 | H97 | 产气肠杆菌 | <i>Enterobacter aerogenes</i> | <i>Enterobacter aerogenes</i> | 9.639 |
| 87 | H98 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.739 |
| 88 | H99 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.685 |
| 89 | H100 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.633 |
| 90 | H101 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.698 |
| 91 | H102 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.674 |
| 92 | H103 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.651 |
| 93 | H104 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.671 |
| 94 | H105 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.702 |
| 95 | H106 | 山羊葡萄球菌 | <i>Staphylococcus caprae</i> | <i>Staphylococcus caprae</i> | 9.129 |
| 96 | H107 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.748 |
| 97 | H108 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.743 |
| 98 | H109 | 山羊葡萄球菌 | <i>Staphylococcus caprae</i> | <i>Staphylococcus caprae</i> | 9.521 |
| 99 | H110 | 克氏柠檬酸杆菌 | <i>Citrobacter koseri</i> | <i>Citrobacter koseri</i> | 9.670 |
| 100 | H111 | 无乳链球菌 | <i>Streptococcus agalactiae</i> | <i>Streptococcus agalactiae</i> | 9.762 |
| 101 | H112 | 肺炎链球菌 | <i>Streptococcus pneumoniae</i> | <i>Streptococcus pneumoniae</i> | 9.680 |
| 102 | H113 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.567 |
| 103 | H114 | 克氏柠檬酸杆菌 | <i>Citrobacter koseri</i> | <i>Citrobacter koseri</i> | 9.681 |
| 104 | H115 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> | <i>Staphylococcus aureus</i> | 9.670 |
| 105 | H116 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.605 |
| 106 | H117 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.527 |
| 107 | H118 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.729 |
| 108 | H119 | 肺炎链球菌 | <i>Streptococcus pneumoniae</i> | <i>Streptococcus pneumoniae</i> | 9.642 |
| 109 | H120 | 铜绿假单胞菌 | <i>Pseudomonas aeruginosa</i> | <i>Pseudomonas aeruginosa</i> | 9.709 |
| 110 | H121 | 肺炎链球菌 | <i>Streptococcus pneumoniae</i> | <i>Streptococcus pneumoniae</i> | 9.677 |

Annex 2: Identification results of Clinic strains (176 strains)

| No. | Experimental strain | | | Identification result Autof ms1000 | |
|-----|---------------------|--------------|------------------------------------|---------------------------------------|-------|
| | Sample number | Chinese name | Latin name | Identification result | Score |
| 111 | H122 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.672 |
| 112 | H123 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.718 |
| 113 | H124 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | <i>Klebsiella pneumoniae</i> | 9.721 |
| 114 | H125 | 停乳链球菌 | <i>Streptococcus dysgalactiae</i> | <i>Streptococcus dysgalactiae</i> | 9.677 |
| 115 | H126 | 头葡萄球菌 | <i>Staphylococcus capitis</i> | <i>Staphylococcus capitis</i> | 9.484 |
| 116 | H127 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.696 |
| 117 | H128 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.675 |
| 118 | H129 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.752 |
| 119 | H130 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.782 |
| 120 | H132 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.712 |
| 121 | H133 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.750 |
| 122 | H134 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.710 |
| 123 | H135 | 粪肠球菌 | <i>Enterococcus faecalis</i> | <i>Enterococcus faecalis</i> | 9.690 |
| 124 | H136 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.655 |
| 125 | H137 | 头葡萄球菌 | <i>Staphylococcus capitis</i> | <i>Staphylococcus capitis</i> | 9.196 |
| 126 | H138 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.731 |
| 127 | H139 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.643 |
| 128 | H140 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.725 |
| 129 | H141 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.553 |
| 130 | H142 | 头葡萄球菌 | <i>Staphylococcus capitis</i> | <i>Staphylococcus capitis</i> | 9.326 |
| 131 | H143 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.701 |
| 132 | H144 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.597 |
| 133 | H145 | 铜绿假单胞菌 | <i>Pseudomonas aeruginosa</i> | <i>Pseudomonas aeruginosa</i> | 9.616 |
| 134 | H146 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.622 |
| 135 | H147 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.655 |
| 136 | H148 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.645 |
| 137 | H149 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.674 |
| 138 | H150 | 金色黏液棒杆菌 | <i>Corynebacterium aurimucosum</i> | <i>Corynebacterium aurimucosum</i> | 9.558 |
| 139 | H151 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> | <i>Staphylococcus aureus</i> | 9.649 |
| 140 | H152 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.731 |
| 141 | H153 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.526 |
| 142 | H154 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.332 |
| 143 | H155 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.763 |
| 144 | H156 | 屎肠球菌 | <i>Enterococcus faecium</i> | <i>Enterococcus faecium</i> | 9.724 |
| 145 | H158 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.693 |
| 146 | H160 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.729 |

Annex 2: Identification results of Clinic strains (176 strains)

| No. | Experimental strain | | | Identification result Autof ms1000 | |
|-----|---------------------|--------------|---|---|-------|
| | Sample number | Chinese name | Latin name | Identification result | Score |
| 147 | H161 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.638 |
| 148 | H162 | 解没食子酸链球菌 | <i>Streptococcus gallolyticus</i> | <i>Streptococcus gallolyticus</i> | 9.625 |
| 149 | H163 | 腐生葡萄球菌 | <i>Staphylococcus saprophyticus</i> | <i>Staphylococcus saprophyticus</i> | 9.542 |
| 150 | H164 | 木糖氧化无色小杆菌 | <i>Achromobacter xylosoxidans</i> | <i>Achromobacter xylosoxidans</i> | 9.427 |
| 151 | H165 | 卡他莫拉菌 | <i>Moraxella sg Branhamella catarrhalis</i> | <i>Moraxella sg Branhamella catarrhalis</i> | 9.701 |
| 152 | H166 | 腐生葡萄球菌 | <i>Staphylococcus saprophyticus</i> | <i>Staphylococcus saprophyticus</i> | 9.133 |
| 153 | H167 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.727 |
| 154 | H168 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.744 |
| 155 | H169 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.714 |
| 156 | H170 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.656 |
| 157 | H171 | 非发酵棒杆菌 | <i>Corynebacterium afermentans</i> | <i>Corynebacterium afermentans</i> | 8.245 |
| 158 | H172 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.656 |
| 159 | H173 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.605 |
| 160 | H174 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.723 |
| 161 | H175 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.739 |
| 162 | H176 | 无乳链球菌 | <i>Streptococcus agalactiae</i> | <i>Streptococcus agalactiae</i> | 9.782 |
| 163 | H177 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.685 |
| 164 | H178 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.630 |
| 165 | H179 | 斯氏普罗威登氏菌 | <i>Providencia stuartii</i> | <i>Providencia stuartii</i> | 9.671 |
| 166 | H180 | 白念珠菌 | <i>Candida albicans</i> | <i>Candida albicans</i> | 9.553 |
| 167 | H181 | 人葡萄球菌 | <i>Staphylococcus hominis</i> | <i>Staphylococcus hominis</i> | 9.551 |
| 168 | H182 | 头葡萄球菌 | <i>Staphylococcus capitis</i> | <i>Staphylococcus capitis</i> | 9.586 |
| 169 | H183 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.725 |
| 170 | H184 | 奇异变形菌 | <i>Proteus mirabilis</i> | <i>Proteus mirabilis</i> | 9.576 |
| 171 | H185 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.560 |
| 172 | H186 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | <i>Staphylococcus epidermidis</i> | 9.538 |
| 173 | H187 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.698 |
| 174 | H188 | 大肠埃希氏菌 | <i>Escherichia coli</i> | <i>Escherichia coli</i> | 9.717 |
| 175 | H189 | 溶血葡萄球菌 | <i>Staphylococcus haemolyticus</i> | <i>Staphylococcus haemolyticus</i> | 9.337 |
| 176 | H190 | 非发酵棒杆菌 | <i>Corynebacterium afermentans</i> | <i>Corynebacterium afermentans</i> | 8.847 |

Evaluation statistics:

There were 176 clinic isolates covering 45 species have been identified in this experiment, containing Enterobacteriaceae, Staphylococcus, Streptococcus, Corynebacterium, Yeast, etc. The identification results were summarized as below:

Table 1. Identification accuracy

| Microbe type | Autof ms1000 | | | | |
|--------------------|--------------|-----------|-----------|-----------|--------------|
| | Good result | | | No result | False result |
| | [9.5-10) | [9.0-9.5) | [6.0-9.0) | [0-6.0) | \ |
| Enterobacteriaceae | 99 | | | | |
| Staphylococcus | 26 | 9 | | | |
| Streptococcus | 11 | | | | |
| Enterococcus | 9 | | | | |
| Corynebacterium | 3 | 1 | 2 | | |
| Yeast | 3 | 1 | | | |
| Other | 11 | 1 | | | |
| Total | 162 | 12 | 2 | | |
| Accuracy (%) | | 100% | | 0 | 0 |

It can be seen from the tables that the identification accuracy of Autof ms1000 was 100% for the identified 176 clinic isolates.

Annex 3: Identification repeatability test results (65 strains)

| No | Experimental strain | | | Identification result | | |
|----|---------------------|--------------|---|-----------------------|----------|----------|
| | | | | Autof ms1000 | | |
| | ATCC number | Chinese name | Latin name | Repeat 1 | Repeat 2 | Repeat 3 |
| 1 | ATCC 17925 | 洛菲不动杆菌 | <i>Acinetobacter lwoffii</i> | 9.528 | 9.609 | 9.582 |
| 2 | ATCC 49139 | 鲍曼不动杆菌 | <i>Acinetobacter baumannii</i> | 9.696 | 9.649 | 9.617 |
| 3 | ATCC 49140 | 亲水气单胞菌 | <i>Aeromonas hydrophila</i> | 9.577 | 9.622 | 9.646 |
| 4 | ATCC 35655 | 粪产碱杆菌 | <i>Alcaligenes faecalis subsp. faecalis</i> | 9.665 | 9.769 | 9.677 |
| 5 | ATCC 11376 | 解硫酸素杆菌 | <i>Aneurinibacillus aneurinolyticus</i> | 9.775 | 9.772 | 9.740 |
| 6 | CMCC 63303 | 蜡样芽胞杆菌 | <i>Bacillus cereus</i> | 9.749 | 9.672 | 9.743 |
| 7 | ATCC 23745 | 脆弱拟杆菌 | <i>Bacteroides fragilis</i> | 9.731 | 9.728 | 9.719 |
| 8 | ATCC 8503 | 吉氏拟杆菌 | <i>Bacteroides macerans</i> | 9.729 | 9.776 | 9.684 |
| 9 | ATCC 10580 | 支气管炎博德特菌 | <i>Bordetella bronchiseptica</i> | 9.690 | 9.767 | 9.722 |
| 10 | ATCC 14053 | 白色念珠菌 | <i>Candida albicans</i> | 9.403 | 9.483 | 9.349 |
| 11 | ATCC 66029 | 热带念珠菌 | <i>Candida tropicalis</i> | 9.512 | 9.596 | 9.270 |
| 12 | ATCC 12464 | 败毒梭菌 | <i>Clostridium septicum</i> | 9.665 | 9.716 | 9.670 |
| 13 | ATCC BAA-1293 | 纹带棒杆菌 | <i>Corynebacterium striatum</i> | 9.784 | 9.630 | 9.649 |
| 14 | ATCC 9949 | 土生隐球菌 | <i>Cryptococcus humicola</i> | 9.534 | 9.519 | 9.509 |
| 15 | ATCC 13690 | 新型隐球菌 | <i>Cryptococcus neoformans</i> | 9.539 | 9.446 | 9.303 |
| 16 | ATCC 49533 | 粪肠球菌 | <i>Enterococcus faecalis</i> | 9.768 | 9.778 | 9.688 |
| 17 | ATCC 8739 | 大肠埃希菌 | <i>Escherichia coli</i> | 9.613 | 9.685 | 9.632 |
| 18 | ATCC 28576 | 头状地霉菌 | <i>Geotrichum capitatum</i> | 9.236 | 9.173 | 9.509 |
| 19 | ATCC 9006 | 流感嗜血杆菌 | <i>Haemophilus influenzae</i> | 9.345 | 9.583 | 9.368 |
| 20 | ATCC 9007 | 流感嗜血杆菌 | <i>Haemophilus influenzae</i> | 9.567 | 9.656 | 9.658 |
| 21 | ATCC 23330 | 金氏金氏菌 | <i>Kingella kingae</i> | 9.774 | 9.755 | 9.683 |
| 22 | ATCC BAA-752 | 克氏库克菌 | <i>Kocuria kristinae</i> | 9.656 | 9.569 | 9.442 |
| 23 | ATCC BAA-751 | 单核细胞增生李斯特菌 | <i>Listeria monocytogenes</i> | 9.681 | 9.767 | 9.661 |
| 24 | ATCC 49143 | 卡他莫拉菌 | <i>Moraxella catarrhalis</i> | 9.683 | 9.708 | 9.725 |
| 25 | ATCC 23970 | 乳糖奈瑟菌 | <i>Neisseria lactamica</i> | 9.692 | 9.704 | 9.642 |
| 26 | ATCC 13090 | 脑膜炎奈瑟菌 | <i>Neisseria meningitidis</i> | 9.637 | 9.507 | 9.611 |
| 27 | ATCC 13102 | 脑膜炎奈瑟菌 | <i>Neisseria meningitidis</i> | 9.779 | 9.617 | 9.767 |
| 28 | ATCC 3308 | 鼻疽诺卡菌 | <i>nocardia farcinica</i> | 9.228 | 9.072 | 9.213 |
| 29 | ATCC 15032 | 中间普雷沃菌 | <i>Prevotella intermedia</i> | 9.790 | 9.789 | 9.705 |
| 30 | ATCC 25845 | 产黑色素普雷沃菌 | <i>Prevotella melaninogenica</i> | 9.617 | 9.601 | 9.641 |
| 31 | ATCC 11827 | 痤疮丙酸杆菌 | <i>Propionibacterium acnes</i> | 9.524 | 9.576 | 9.549 |
| 32 | ATCC 7002 | 奇异变形杆菌 | <i>Proteus mirabilis</i> | 9.786 | 9.796 | 9.532 |
| 33 | ATCC BAA-1744 | 铜绿假单胞菌 | <i>Pseudomonas aeruginosa</i> | 9.609 | 9.618 | 9.522 |

Annex 3: Identification repeatability test results (65 strains)

| No | Experimental strain | | | Identification result | | |
|----|---------------------|--------------|--|-----------------------|----------|----------|
| | ATCC number | Chinese name | Latin name | Autof ms1000 | | |
| | | | | Repeat 1 | Repeat 2 | Repeat 3 |
| 34 | ATCC 49129 | 危险（隐秘）罗尔斯顿菌 | <i>Ralstonia insidiosa</i> | 9.712 | 9.706 | 9.329 |
| 35 | ATCC 700403 | 缓慢葡萄球菌 | <i>Staphylococcus lentus</i> | 9.575 | 9.622 | 9.576 |
| 36 | ATCC 29061 | 松鼠葡萄球菌 | <i>Staphylococcus sciuri ssp. Sciuri</i> | 9.386 | 9.472 | 9.457 |
| 37 | ATCC 12388 | 停乳链球菌 | <i>Streptococcus dysgalactiae</i> | 9.671 | 9.699 | 9.710 |
| 38 | ATCC 49136 | 肺炎链球菌 | <i>Streptococcus pneumoniae</i> | 9.715 | 9.769 | 9.670 |
| 39 | ATCC 204094 | 粘状毛孢子菌 | <i>Trichosporon mucoides</i> | 9.398 | 9.313 | 9.476 |
| 40 | ATCC 10790 | 小伟荣球菌 | <i>Veillonella parvula</i> | 9.647 | 9.706 | 9.729 |
| 41 | ATCC 9773 | 解脂耶氏酵母 | <i>Yarrowia lipolytica</i> | 9.566 | 9.511 | 9.576 |
| 42 | ATCC 49619 | 肺炎链球菌 | <i>Streptococcus pneumoniae</i> | 9.625 | 9.646 | 9.663 |
| 43 | ATCC 35218 | 大肠埃希氏菌 | <i>Escherichia coli</i> | 9.750 | 9.670 | 9.707 |
| 44 | ATCC 27853 | 铜绿假单胞菌 | <i>Pseudomonas aeruginosa</i> | 9.591 | 9.579 | 9.590 |
| 45 | ATCC 25922 | 大肠埃希氏菌 | <i>Escherichia coli</i> | 9.673 | 9.634 | 9.618 |
| 46 | ATCC 29212 | 粪肠球菌 | <i>Enterococcus faecalis</i> | 9.764 | 9.803 | 9.690 |
| 47 | ATCC 29213 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> | 9.730 | 9.822 | 9.770 |
| 48 | ATCC 17743 | 齿啮韦荣氏菌 | <i>Veillonella denticariosi</i> | 9.732 | 9.761 | 9.801 |
| 49 | ATCC 49943 | 空肠弯曲菌 | <i>Campylobacter jejuni</i> | 9.636 | 9.506 | 9.669 |
| 50 | Clinic H5 | 脑膜炎奈瑟氏球菌 | <i>Neisseria meningitidis</i> | 9.747 | 9.687 | 9.672 |
| 51 | Clinic H6 | 奇异变形菌 | <i>Proteus mirabilis</i> | 9.679 | 9.665 | 9.620 |
| 52 | Clinic H12 | 金黄色葡萄球菌 | <i>Staphylococcus aureus</i> | 9.558 | 9.643 | 9.452 |
| 53 | Clinic H15 | 肺炎克雷伯氏菌 | <i>Klebsiella pneumoniae</i> | 9.692 | 9.669 | 9.670 |
| 54 | Clinic H18 | 斯氏普罗威登斯菌 | <i>Providencia stuartii</i> | 9.563 | 9.539 | 9.602 |
| 55 | Clinic H24 | 大肠埃希氏菌 | <i>Escherichia coli</i> | 9.697 | 9.712 | 9.726 |
| 56 | Clinic H27 | 产硫化物球短链菌 | <i>Globicatella sulfidifaciens</i> | 9.314 | 9.518 | 9.236 |
| 57 | Clinic H31 | 粪肠球菌 | <i>Enterococcus faecalis</i> | 9.773 | 9.720 | 9.729 |
| 58 | Clinic H35 | 抗逆棒杆菌 | <i>Corynebacterium resistens</i> | 9.472 | 9.370 | 9.475 |
| 59 | Clinic H44 | 纹带棒杆菌 | <i>Corynebacterium striatum</i> | 9.523 | 9.345 | 9.581 |
| 60 | Clinic H71 | 奇异变形菌 | <i>Proteus mirabilis</i> | 9.721 | 9.697 | 9.737 |
| 61 | Clinic H125 | 停乳链球菌 | <i>Streptococcus dysgalactiae</i> | 9.524 | 9.627 | 9.616 |
| 62 | Clinic H141 | 表皮葡萄球菌 | <i>Staphylococcus epidermidis</i> | 9.534 | 9.359 | 9.253 |
| 63 | Clinic H150 | 金色黏液棒杆菌 | <i>Corynebacterium aurimucosum</i> | 9.378 | 9.299 | 9.107 |
| 64 | Clinic H164 | 木糖氧化无色小杆菌 | <i>Achromobacter xylosoxidans</i> | 9.545 | 9.490 | 9.509 |
| 65 | Clinic H68 | 近平滑假丝酵母 | <i>Candida parapsilosis</i> | 9.530 | 9.504 | 9.480 |

Evaluation statistics:

There were 65 strains covering 50 species have been identified in this experiment, including 49 ATCC International standard strains, 16 clinic strains, containing Non-fastidious Gram positive bacteria, Non-fastidious Gram negative bacteria, Fastidious bacteria, Anaerobic bacteria, Yeast, etc. The experimental data show that Autof ms1000 always provide same and correct identification results during the 3 repeated test and the identification scores were above 9.0

It can be seen from this experiment that Autof ms1000 got perfect repeatability based on the 65 experimental strains.