



Thermo Fisher Scientific
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RE: Sole Source Supplier Applied Biosystems™ Instruments, Consumables and Software for Human Identification

Dear Valued Customer:

Thank you for your interest in Thermo Fisher Scientific's Applied Biosystems™ brand of instruments, software and consumables for Human Identification. Please accept this letter to document that Thermo Fisher Scientific is the sole manufacturer and distributor of the Applied Biosystems Genetic Analyzers, real-time PCR thermal cyclers, thermal cyclers, Ion TorrentNext Generation Sequencing Systems and associated software as detailed in Table 1.

Genetic Analyzers, Ion instruments, real-time PCR thermal cyclers and Converge software contain a dedicated computer that is customized to operate the system and is compatible with our software. The computers attached to these systems are imaged specifically for Thermo Fisher Scientific and are not available from another source.

The Applied Biosystems Genetic Analyzers are the only commercially available 4, 8, and 24 capillary systems that have been validated according to SWGDAM guidelines to analyze DNA samples for the purpose of Human Identification. In addition, Thermo Fisher Scientific is the sole distributor of validated system consumables including capillaries, cartridges, chips, polymer, buffers, size standards and replacement parts as detailed in Table 2. Only Thermo Fisher Scientific factory trained, and certified engineers are authorized to service these instruments.

Further documentation describing the unique specifications of the Applied Biosystems brand of genetic analyzers and thermal cyclers can be found on the Thermo Fisher Scientific website, including user manuals.

In addition to Applied Biosystems instruments and software, Thermo Fisher Scientific is the sole manufacturer of all Applied Biosystems consumables, including kits for sample

preparation, quantitation, and amplification as described in Table 3. Furthermore, Life Technologies is the sole authorized distributor and supplier within North America of such products.

This information should justify Thermo Fisher as “Sole Source” supplier for all Applied Biosystems instruments, software, consumables, and services that you need to perform DNA Analysis, for the purpose of Human Identification. Please note that the SKU’s in the tables are not exhaustive but represent the key sole source products in our portfolio.

In addition, we are pleased to provide Thermo Fisher Scientific Human Identification Professional Services (HPS) group. HPS provides consultancy and validation services for Human Identification applications with expertise focused on the extensive line of the Applied Biosystems™ brand of instruments, software, and consumables. The HPS team combines extensive internal technical product knowledge with vast experience in forensic laboratory validations across a global team to customize end-to-end solutions for laboratories. The HPS team has completed hundreds of projects since 2007 that include many combinations of the Applied Biosystems products listed above.

The HPS team is comprised of forensic scientists with broad and extensive validation experience for forensic DNA applications. Validation project work at customer laboratories is performed by Thermo Fisher Scientific Validation Application Specialists (VAS), who have all worked as forensic scientists and understand the workflow, standards, attention to detail, and unique needs of forensic DNA laboratories. External consultants with the relevant qualifications and training may also be involved in some areas of the validation project.

We appreciate your business and request that if you have any further questions that you contact me directly.

Regards,

A handwritten signature in cursive script that reads "A. Snape".

Adam Snape
Associate Director, Product Management
Human Identification Business

Table 1: Instruments & Software	Table 2: System Consumables
4406016 - 3500xL Genetic Analyzer for Human Identification	4404683 – 3500 Genetic Analyzer 8-capillary Array, 36 cm
4406017 - 3500 Genetic Analyzer for Human Identification	4404685 - 3500 Genetic Analyzer 8-capillary Array, 50 cm
A46228 - SeqStudio™ Genetic Analyzer for HID, laptop, training	4404687 - 3500 Genetic Analyzer 24-capillary Array, 36 cm
A41432 - HID GeneStudio S5 Plus System	4404689 - 3500 Genetic Analyzer 24-capillary Array, 50 cm
A41431 - HID GeneStudio S5 Plus System	4393718 - Conditioning Reagent, 3500 Series
A30070 - HID Ion Chef Instrument	4393927 - Anode Buffer Container (ABC) 3500 Series
A34321 - QuantStudio 5 Real-Time PCR System, laptop	4408256 - Cathode Buffer Container (ABC) 3500 Series
A34322 - QuantStudio 5 Real-Time PCR System, desktop	4393710 - POP-4 Polymer for 3500/3500xL Genetic Analyzer (960 samples)
4441763 - AutoMate Express Forensic DNA Extraction System	4408399 – GeneScan 600 LIZ dye Size Standard v2.0
A40059 - SW,3500/XL DCS4.0	4322682 - GeneScan 500 LIZ dye Size Standard
A40376 - 3500 DC4.0 WIN10 Upgrade	4366589 - GeneScan 600 LIZ dye Size Standard
A43686 - 3500 DCS3.3 WIN10 Upgrade	A41331 - SeqStudio Cartridge v2
A38440 - GMID-X Software V1.6, full upgrade	A33401 - SeqStudio Cathode Buffer Container
A38444 - GMID-X Software V1.6, full demo	A27762 - Ion 520 Chip Kit
A39975 - GMID-X Software v1.6, full installation	A27763 - Ion 530 Chip Kit - 4 Reactions
A39976 – GMID-X Software v1.6, Client Installation	A27764 - Ion 530 Chip Kit
A38441 - GMID-X Software v1.6, Client Upgrade	A41841 - AB RHID PRIMARYCTRG GFE 100
A31152 - HID Real-Time PCR Analysis Software v1.3	A53084 - AB RHID PRIMARYCTRG GFE 150
A78901 - HID Real-Time PCR Analysis Software v1.4 Installation	A41847 - AB RHID PRIMARYCTRG NGM 100
A78902 - HID Real-Time PCR Analysis Software v1.4 Upgrade	A53085 - AB RHID PRIMARYCTRG NGM 150
A35131 - Converge Server and Software	
A52127- HID VeritiPro™ 96-well Thermal Cycler	
4484075 – ProFlex™ 96-well PCR System	
4484076 – ProFlex™ 2x 96-well System	
4484073 – ProFlex™ 3x 32-well PCR System	
4366604 – 7500 Real-Time PCR System for Human Identification	
A41810 - AB RapidHIT ID System	
A51271 - RapidHIT ID DNA Booking System	
A41813 - AB RLINK SW V1.0 1LIC EACH	
A43966 - AB RLINK SW V1.2 1LIC	
A51535 - AB RAPIDHIT ID DNA BS V1.0	
A43976 - AB RLINK DNABS V1.0 1LIC	
A41816 -AB RLINK SW V1.0 SED APP EACH	
A41817 - AB RLINK SW V1.0 KIN APP EACH	
A41818 - AB RLINK SW V1.0 MATCH APP EACH	
A41819 - AB RLINK SW V1.0 FAM APP EACH	
A41820 - AB RLINK SW v1.0 SW Upgrade	
A43973 - AB RHID SW V1.3 UPGRADE KIT	
A49069 -RHID UPG, W10 LTSC 2019 CARTON	

Table 3: Consumables

4322288 - Identifiler PCR Amplification Kit (200 tests)	A33208 - Ion S5 Precision ID Chef & Sequencing Kit
4427368 - Identifiler Plus PCR Amplification Kit (200tests)	A33212 - Precision ID DL8 kit
4467831 - Identifiler Direct PCR Amplification Kit (200 tests)	A33586 - Precision ID IonCode Barcode Adapters
4425042 - DS-36 Matrix Standard (Dye Set J6)	A35850 - Ion S5 Precision ID Chef & Sequencing kit
4457889 - NGM SElect PCR Amplification kit (200 tests)	4387746 - Quantifiler Duo DNA Quantification kit
4472193 - NGM SElect Express PCR Amplification kit (200 tests)	4482910 - Quantifiler Trio DNA Quantification kit
4474665 – GlobalFiler Express PCR Amplification kit (1,000 tests)	4441352 - Prepfilier Express DNA Extraction kit
4476135 - GlobalFiler PCR Amplification kit (200 tests)	4441351 - Prepfilier Express DNA BTA Extraction kit
4359513 - Yfiler PCR Amplification kit (100 tests)	4463353 - Prepfilier Automated DNA Extraction kit
4373872 - Minifiler PCR Amplification kit (100 tests)	A42470 - AB RHID ACE GFE NEG CTRL CTDG
4482730 - Yfiler Plus PCR Amplification kit (500 tests)	A43941 - AB RI SC 10 EVAL KIT KIT
A31832 - NGM Detect PCR Amplification kit (200 tests)	A43942 - AB RI SC 50 KIT KIT
A32014 - Verifiler Express PCR Amplification kit (200 tests)	A42471 - AB RHID Utility CTDG Cartridge
400096RH - RAPIDHIT ID GFE CNTRL 5 Sample CRTRDG KIT	A41838 - AB RHID ACE NGM 50 SMPL KIT EACH
400114RH - RAPIDHIT ID ACE GFE EVAL 10CRTRDG KIT	A46069 - RHID ACE GFE SMPL KIT W/SWAB EACH
A41831 - AB RHID ACE GFE 50 SMPL KIT EACH	
A42469 - AB RHID ACE GFE POS CTRL CTDG	
A32970 - Yfiler Platinum PCR Amplification kit (200tests)	
A35495 - Verifiler Plus PCR Amplification kit (200tests)	
A25642 - Precision ID Ancestry Panel	
A25643 - Precision ID Identity Panel	
A26435 - Precision ID Library Kit	
A26808 - Precision ID Identity and Library kit bundle	
A30938 - Precision ID mtDNA Whole Genome Panel(96 reactions)	
A31443 - Precision ID mtDNA Control Region Panel(96 reactions)	
A33114 - Precision ID GlobalFiler NGS STR Panel v2	