



HOLOTYPE HLA CE

Flexible, Unambiguous, Automated HLA Typing by NGS

FAST PROTOCOL

Pre-master mixed PCR reagents Sample to result in < 48 hours Lowest hands-on time

FLEXIBLE PRODUCT CONFIGURATIONS

5, 7 and 11 loci

SCALABLE

4-288 samples per run

AUTOMATED

Pre-PCR, Post-PCR & Software Analysis

COMPREHENSIVE

Whole gene consensus sequences

OMIXON HLA TWIN CE

DUAL-ALGORITHM GENOTYPING SOFTWARE TO DELIVER THE MOST ACCURATE, HIGH THROUGHPUT HLA GENOTYPING RESULT



HIGHLIGHTS

Less than 5 minutes analysis time per 11-locus sample with recommended specifications

Data analysis time independent of the growing IMGT/HLA database

DRB, DQ Linkage Disequilibrium checks

Complete Novel and Null allele detection

Fully automated analysis after Illumina sequencing run

Export genotyping results - HML, PDF, JSON, XLS

Integration with LIMS, such as Histotrac and mTilda

Simple assignment and multi-layer approval workflows

DATA VISUALIZATION & STATISTICS

HELPS TO TROUBLESHOOT AND INTERPRET ANY POTENTIAL QUALITY ISSUES BASED ON 24 QUALITY CONTROL METRICS





TECHNICAL REQUIREMENTS

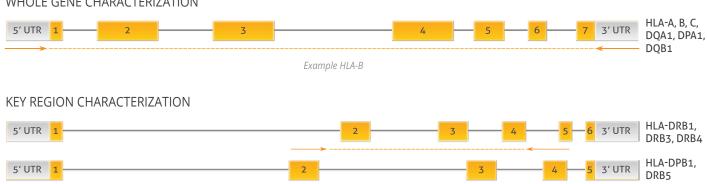
	DESKTOP	SERVER		CLIENT
		Typer Server	Reporting Server	
CPU		64-bit multi-core		
MEMORY (MIN)	16 GB	24 GB	6 GB	4 GB
OPERATION SYSTEM	Windows, Linux, macOS	Windows, Linux		Windows, Linux, macOS

HOLOTYPE HLA CE ASSAY

LICENSED ASSAY FROM THE CHILDREN'S HOSPITAL OF PHILADELPHIA (CHOP) THAT PROVIDES AMPLIFICATION AND LIBRARY PREPARATION REAGENTS FOR COMPREHENSIVE ANALYSIS OF UP TO 11 HLA LOCI

GENE COVERAGE

WHOLE GENE CHARACTERIZATION



NGS WORKFLOW

HOLOTYPE HLATM **SAMPLE PREPARATION**

- Less than 0.8µg of DNA required for 11 locus amplification
- Compatible with multiple DNA sources: whole blood, cord blood, buccal swabs & saliva
- 5, 7 or 11 locus amplifications
- Scalable up to 96 samples /11 loci, 192 / 7 loci and 288 / 5 loci***

6h 45min 35min 15min*

HANDS-ON TIME WITH AUTOMATION A Y 2h 30min 50min 5h 10min HANDS-ON TIME WITH AUTOMATION

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HOLOTYPE HLA™ LIBRARY PREPARATION

- 4 hours hands-on time for 24 samples
- < 48 hours turnaround time from sample to result
- Library Size Selection: Pippin Prep or Magnetic Beads
- Holotype HLA libraries can be combined with other libraries

ILLUMINA SEQUENCING

- MiSeq, MiniSeq and iSeq supported
- Any size flow cell supported depending on throughput
- 300 and 500-cycle chemistry supported



20min | 19h 20min** TOTAL TIME



HLA TWIN™ **DATA ANALYSIS**

- Fully automated analysis after Illumina sequencing run
- Two independent genotyping algorithms
- 24 Quality Control Metrics for confident assignment
- Balanced coverage between alleles at a locus, between loci in a sample and among samples
- Deep and even coverage across the whole targeted region

All timings are for 24 samples, Holotype HLA v3.0.1 CE

- Timings are based on the liquid handler used
- ** On a MiSeq 300-cycle Micro flow cell
- *** On a 300-cycle Standard flow cell with cluster density 1,000K/mm²

HIGHLIGHTS

Simple workflow and technician-friendly protocol Fully phased whole gene consensus sequences Multiple safe stopping points Pre-plated indexed adapters Kit splitting and flexibility Elimination of error-prone pipetting steps

VALUE ADDED



Pre-sales presentation & NGS cost analysis



Site preparation



Onsite training



Validation / Accreditation assistance



Ongoing support in clinical production



24/7 remote support



Center of Excellence program



Omixon Academy

PRODUCT CONFIGURATIONS

KITS*	SAMPLES PER KIT	LOCI	INDEXES	SAMPLES PER RUN*
5 LOCI	96	ABC, DRB1, DQB1	4 x 24 sets, 3 x 96 sets	288
7 LOCI	24 & 96	5+ DPB1, DQA1	4 x 24 sets, 3 x 96 sets	192
11 LOCI	24 & 96	7+ DRB3/4/5, DPA1	4 x 24 sets, 3 x 96 sets	96

All kits are manufactured under ISO-13485

HLA LABS 50+ CLINICAL ROUTINE, 20+ DISTRIBUTORS, 20+ USING CE-IVD, WORLD WIDE COVERAGE





Massachusetts, Pennsylvania, Brazil, Czech Republic, Hungary, Netherlands



Distributors (45+ Territories, 20+ Distributors)

Albania, Algeria, Armenia, Australia, Belarus, Bosnia, Bulgaria, Czech Republic, Egypt, Estonia, France, Georgia, Greece, Hong-Kong, India, Iraq, Israel, Italy, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Latvia, Lebanon, Lithuania, Macedonia, Malaysia, Morocco, Oman, Portugal, Qatar, Romania, Russia, Saudi-Arabia, Serbia, Singapore, Spain, Sub-Sahara & Africa, Taiwan, Thailand, Tunis, Turkey, U.A.E., Uzbekistan, Vietnam



All Omixon activities covered by an ISO 13485:2016 & EN ISO 13485:2016 Quality Management System (QMS)

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On a MiSeq 300-cycle Standard flow cell with cluster density \sim 1,000K/mm 2