



HOLOTYPE HLA™

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, 11 or custom loci

SCALABLE

4-288 samples per run

AUTOMATED

Pre-PCR, Post-PCR & Software Analysis

COMPREHENSIVE

Whole gene consensus sequences

RESEARCH USE ONLY

HLA TWIN™ SOFTWARE

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



HIGHLIGHTS

- Confidence by checking every locus for every sample
- DRB, DQ Linkage Disequilibrium checks
- Complete Novel and Null allele detection
- Fully automated analysis after Illumina sequencing run
- Export genotyping results - HML, PDF, JSON, XLSX
- Integration with LIMS, such as Histotrac and mTilda
- Simple assignment and multi-layer approval workflows

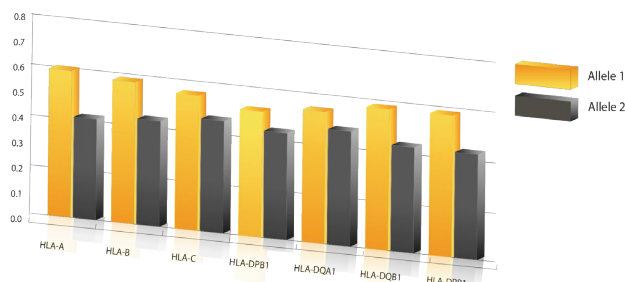
DATA VISUALIZATION & STATISTICS

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

TRAFFIC LIGHT SYSTEM



ALLELE BALANCE



TECHNICAL REQUIREMENTS

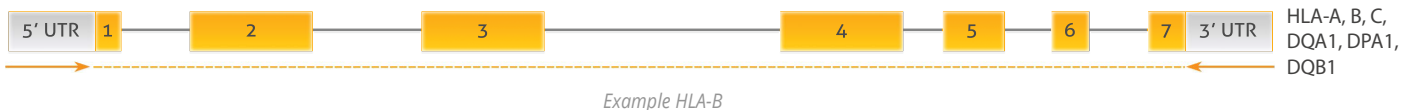
	DESKTOP	SERVER		CLIENT
		Typet Server	Reporting Server	
CPU		64-bit multi-core		
MEMORY (MIN)	32 GB	32 GB	16 GB	16 GB
OPERATION SYSTEM	Windows, Linux, macOS	Windows, Linux		Windows, Linux, macOS

HOLOTYPE HLA™ ASSAY

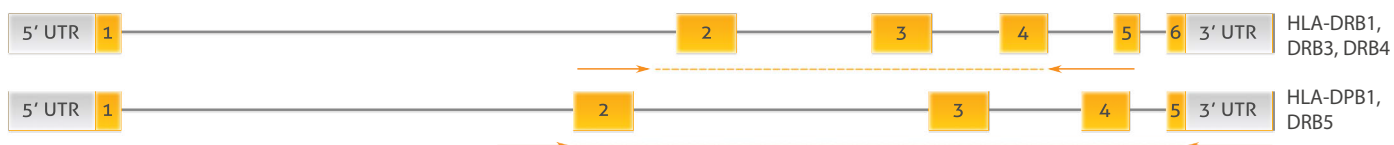
LICENSED ASSAY FROM THE CHILDREN'S HOSPITAL OF PHILADELPHIA (CHOP) THAT PROVIDES AMPLIFICATION AND LIBRARY PREPARATION REAGENTS FOR COMPREHENSIVE ANALYSIS OF UP TO 11 HLA LOCI

GENE COVERAGE

WHOLE GENE CHARACTERIZATION



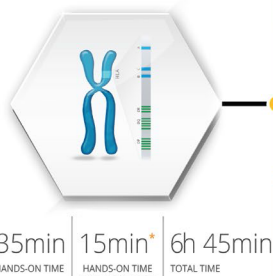
KEY REGION CHARACTERIZATION



NGS WORKFLOW

HOLOTYPE HLA™ 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***



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



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



DAY 1

DAY 2

DAY 3

All timings are for 24 samples, Holotype HLA V3.0

* 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
CUSTOM LOCI	24 & 96	variable	4 x 24 sets, 3 x 96 sets	variable

* All kits are manufactured under ISO-13485

** On a MiSeq 300-cycle Standard flow cell with cluster density ~1,000K/mm²

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



Omixon

Phoenix, Houston, Baltimore, Boston, Barcelona, Prague, Budapest, Maastricht



Distributors

(45+ Territories, 20+ Distributors)

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



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