HLA Explore™ NGS software

HLA Explore™ is HLA genotyping software for genetics/genomics researchers for the analysis and interpretation of any NGS data. It is flexible and customizable to handle all sequencing data types from short read technologies such as Illumina and Ion Torrent, as well as newer long-read technologies from Pacific Biosciences, Oxford Nanopore*.

HLA Explore™ can analyze data from any experiment type i.e. targeted exons, targeted whole genes, whole MHC, whole exome or whole genome. It is high-performance, high-throughput and high-resolution multi-sample software for genotyping analysis, interpretation and reporting.
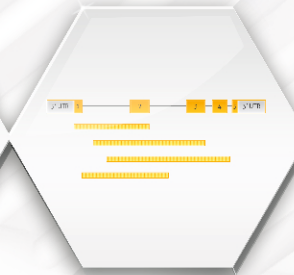
Product Highlights
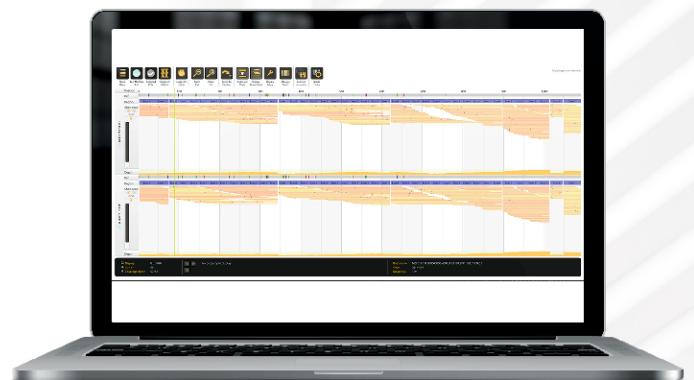

HLA RESEARCH   ANY PLATFORM   ANY INPUT   EXON ANALYSIS

- Unambiguous third-field genotyping results for targeted exons, whole exome or whole genome data **
- Platforms: Illumina, Ion Torrent, Pacific Biosciences and Oxford Nanopore
- Command line automation for integrations with in-house pipelines
- Fast, high throughput, high resolution genotyping for up to 33 HLA loci of the MHC
- Support for external databases (Allele Frequency)
- Export HML 1.0.1 and PDF Summary Reports

*   Available under Beta Testing Agreement
** Depends on experimental design

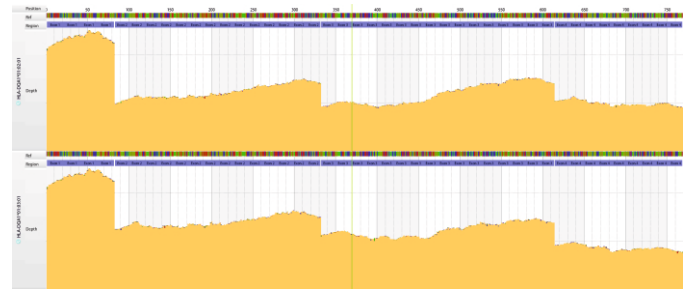**Figure 1:** 3-field genotyping results from targeted sequencing data

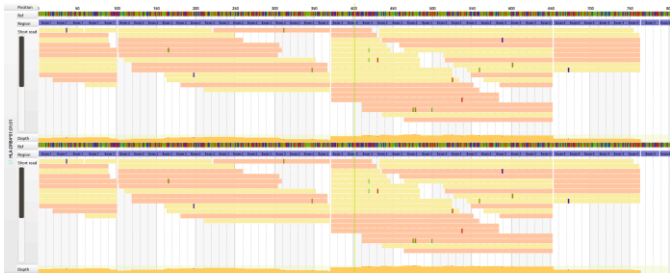**Figure 2:** Deep and even coverage profile for targeted sequencing data
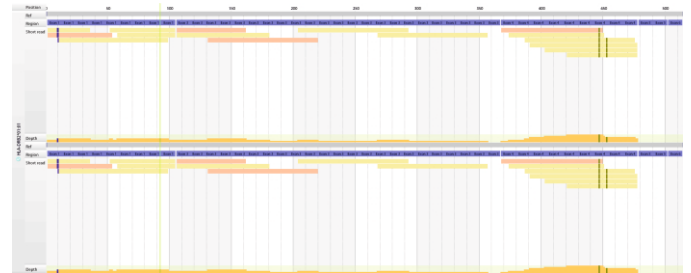

Figure 3: High coverage in WGS data

Figure 4: HLA-DRB2 novel allele candidate found in low coverage whole genome sequencing data

> " *Together with Omixon, we have used next-generation sequencing tools to significantly advance HLA typing.*
>
> *Prof. Dimitri Monos, The Children's Hospital of Philadelphia*

Licensing

Omixon HLA Explore™ is licensed for Desktop computer and Client/Server architectures.

The base module comes with the majority of features for analysis and interpretation of short read sequence data (Illumina, Ion Torrent) for targeted experimental approaches. There are additional modules for Long Read Analysis and Big Data Analysis (WGS and WES).

	Desktop *	Client/Server *
HLA Explore™ **	✔	✔
Long Read Analysis Module ***	✔	✔
Big Data Module	✔	✔

* Implemented as a hardware key, "node locked" license
** Base module
*** Under development
Sold as Annual Subscription Licenses with unlimited analyses

HLA Explore™ "Base" includes analysis of targeted data from multiple technologies, interpretation of QC Metrics and assignment / approval workflow support

Discounts can be applied for multiple modules and multiple users

Technical Requirements

	Desktop	Server	Client
CPU	64 bit multi-core	64 bit multi-core	64 bit multi-core
Memory (minimum/recommended)	12GB/16GB	12GB/16GB	4GB/8GB
Operating system	64 bit Windows / Linux or OS X	64 bit Windows / Linux (OS X not supported)	64 bit Windows / Linux or OS X

All Omixon activities covered by an ISO 13485:2003 & EN ISO 13485:2012 Quality Management System (QMS)