

# ClinEx pro

Extended Clinical Exome NGS kit

## ClinEx pro

ClinEx pro is allowed for the identification of molecular causes in subjects suffering from conditions not attributable to known pathologies, in subjects affected by genetically heterogeneous diseases and complex syndromic pictures.

The kit covers more than **10.000 genes described in OMIM** as related to known pathologies, **plus ~130 hotspots, SNPs, deep intronic regions** with a correlation to known hereditary diseases.

The kit also allows to include the **mitochondrial genes** as identified in MitoMap.

ClinEx pro total target size is 19.5 Mb.

The kit is validated for germline analysis (SNPs, indels, CNVs) of DNA extracted from blood or body tissues samples.

ClinEx pro kit contains all reagents required for the preparation of the capture of specifically designed probes and for the NGS analysis using ThermoFisher.

## TECHNOLOGY

The ClinEx pro kit is part of a DNA-to-variant solution that offers streamlined content, easy-to-perform library preparation, push-button sequencing systems, and simplified data analysis.

## WORKFLOW

Library preparation follows a straightforward, capture-based protocol that can be completed in as little as 36 hours, with < 3 hours hands-on time. Resulting libraries can be normalized, pooled, and then loaded on to a flow cell for sequencing. Prepared libraries are sequenced on any compatible ThermoFisher sequencers.

## VALIDATION

To demonstrate assay capabilities, clinical samples were run in a clinical setting. DNA quality and quantity of the libraries prepared were verified using Qubit and Agilent Bioanalyzer.

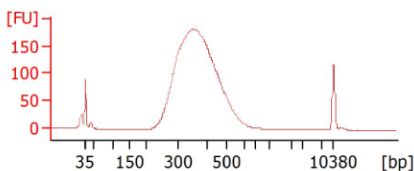


Figure 1: ClinEX pro final library profile example

## SAMPLE PER RUN

Instrument	Samples per run (100x)*
Ion 530™ Chip	1
Ion PI™ Chip/Ion 540™ Chip	4
Ion 550™ Chip	8

*\*the suggested number of samples per chip has been estimated assuming 5% of duplicates, 85% of on target. The optimal number of samples must be empirically calculated on the local setup, expected output for one sample at 100x 2Gb.*

*The volume present in the kit is calculated to allow the subdivision into multiples of 8 analysis sessions. Dividing the kit in different ways decrease the total number of tests that can be performed.*

## ORDERING INFORMATION

Product	REF
ClinEx pro	RC3030Y-16 (16 test)
ClinEx pro	RC3030Y-96 (96 test)
Adapter	
Y ADAPTER	R9001-16 (16 test)
Y ADAPTER	R9001-96 (96 test)

## CONTACTS

For more detailed information about validated automation instrument, please contact us at the address [info@4bases.it](mailto:info@4bases.it)

For the full gene list and the .bed file please contact us at [support@4bases.it](mailto:support@4bases.it)