

# IVF pro

For the carrier analysis and newborn screening of several hereditary disease

## IVF pro

The IVF pro kit dedicated to the carrier analysis and newborn screening of autosomal recessive inherited diseases, rare conditions, X-linked diseases and inherited cancer.

IVF pro is a kit for the analysis of 155 genes and hotspots through a molecular protocol based on Next Generation Sequencing (NGS) technologies. The kit is validated for germline analysis (SNPs, indels, CNVs) of DNA extracted from blood or body tissues ( fresh, frozen, FFPE, FNA) samples.

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

## TECHNOLOGY

The IVF 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 Illumina sequencers.

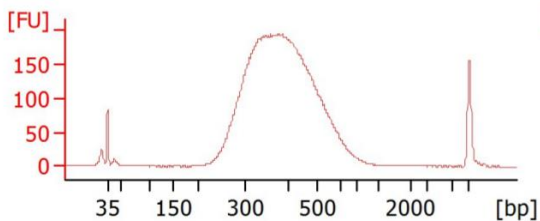


Figure 1. IVF pro library Bioanalyzer profile.

Table 1: List of genes in IVF pro

GBA	BLM	GLB1	CHM
HFE2	EPB42	IDUA	GLA
MPL	HEXA	PKD2	RS1
MTHFR	MEFV	ANXA5	MUTYH
BDNF	ASPA	HFE	BRCA2
ATM	G6PC	PKHD1	BRCA1
HBB	GAA	TFR2	APC
SMPD1	NPC1	PAI	SMN2
F2	GCDH	PEX1	SMN1
DHCR7	APoE	NBN	F13A1
TH	OTOF	ANK1	CFTR
PAH	PJKV	FANCC	DMD
GJB2	FPN1	GALT	RYR1
ATP7B	FSHR	ALDOB	ELANE
GALC	BCHE	ELP1	HAX1
NPC2	AZFa	Yq11.21AZFb	AZFc
SRY	Yq11.221		

## SAMPLE PER RUN

Instrument	Samples per run
MiSeq Nano Kit v2 (300-cycles)	3
MiSeq Nano Kit v2 (500-cycles)	3
MiSeq Micro Kit v2 (300-cycles)	8
MiSeq Kit v2 (300-cycles)	48
MiSeq Kit v2 (500-cycles)	48
MiSeq Kit v3 (600-cycles)	80
MiniSeq Mid Output Kit (300-cycles)	24
MiniSeq High Output Kit (300-cycles)	80
iSeq 100 i1 kit (300-cycles)	8
NextSeq 550 Mid-Output Kit	440
NextSeq 550High-Output Kit	1360

\*the estimated maximum number of samples per cartridge / chip assumes a reading depth of 300x for the germline. The optimal number of samples can be empirically estimated on the local setup

## Ordering Information

Product	REF
IVF pro	C3100-16 (16 test)
IVF pro	C3100-96 (96 test)
<i>For Illumina instruments</i>	
UDI Primers Set A (96 test)	7001
UDI Primers Set B (96 test)	7002
UDI Primers Set C (96 test)	7003
UDI Primers Set D (96 test)	7004
UDI Primers Set 16 (16 test)	7005