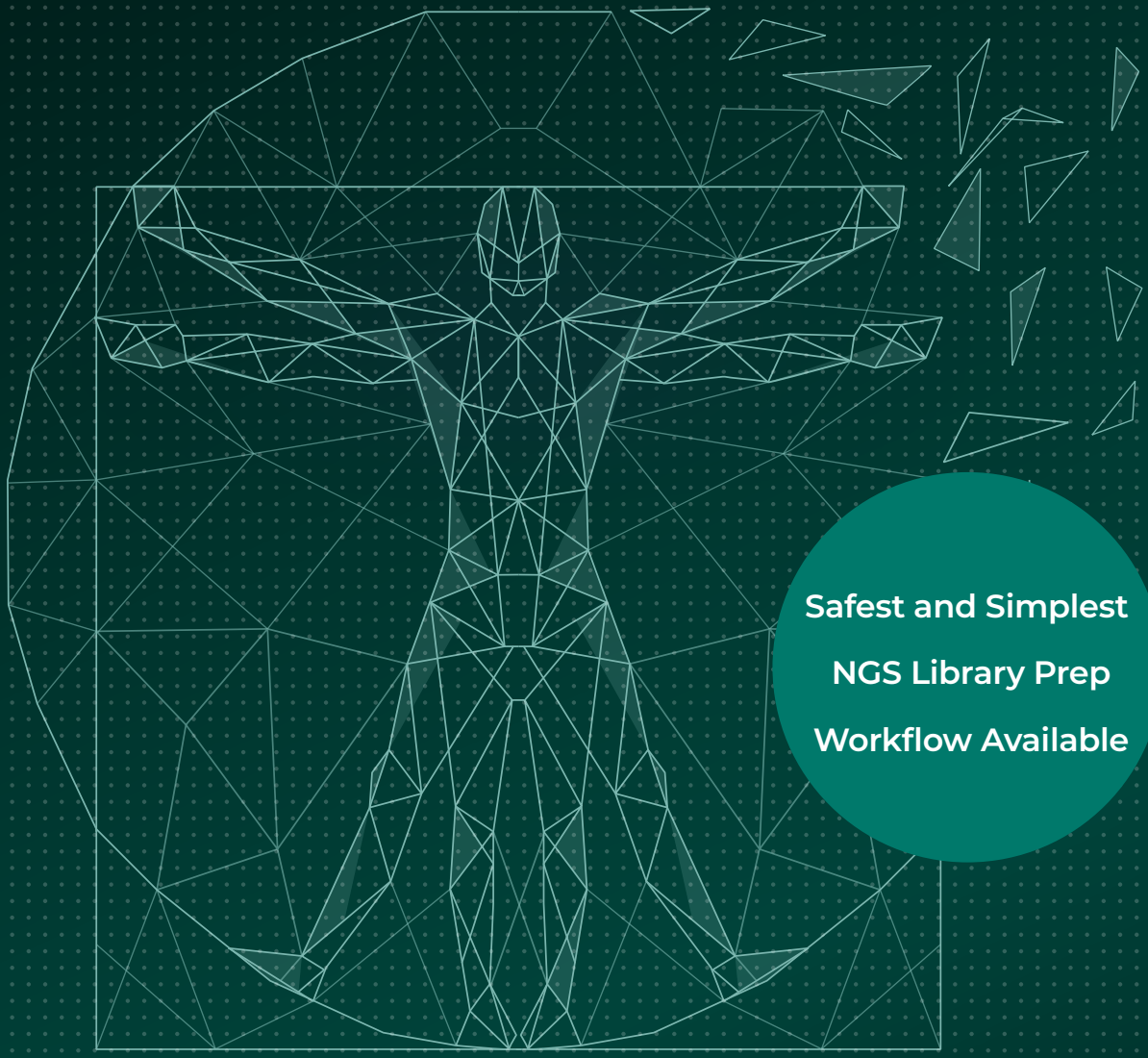
EasySeq™

Human Gene Sequencing

BRCA1/2 + CHEK2, PALB2, TP53

NGS Library Prep by Reverse Complement PCR



Safest and Simplest NGS Library Prep Workflow Available

CE IVD

- Providing detailed insights into identification of prognostic and predictive markers associated with cancer
- Obtaining reliable results, enabling informed decision making towards effective cancer risk management and therapeutic strategies

NimaGen.

Innovators in DNA Sequencing Technologies

Introduction

A well-known hallmark of breast cancer is the accumulation of mutations that lead to genetic instability. Mutations in the inheritable genes *BRCA1*, *BRCA2, CHEK2* and *PALB2* are associated with increased breast cancer risk. *TP53* is the most frequently mutated tumor suppressor gene in all human cancers. Therefore, early detection of these mutations remains a vital preventative measure, especially in families with a known (breast) cancer history.

EasySeq™ NGS Library Prep by RC-PCR

Patented Reverse Complement PCR (RC-PCR) allows for a simple, robust and safe workflow. Multiplex target amplification, unique dual indexing and addition of adapters all occur simultaneously in a single closed-tube reaction, decreasing the risk of PCR contamination and sample swapping. Moreover, RC-PCR dynamics elevate assay specificity and sensitivity, supporting informed clinical decision making.

EasySeq™ *BRCA 1/2 + CHEK2, PALB2, TP53*

EasySeq™ NGS Library Prep by Reverse Complement PCR for human gene re-sequencing provides a straightforward library preparation of all coding exons of the (breast) cancer associated genes specified, including a minimum of 20 bases upstream and downstream of each exon. EasySeq™ *BRCA1/2 + CHEK2, PALB2* and *TP53* assays are designed for Illumina® and are CE-IVD certified for use with DNA extracted from peripheral blood or tumor tissue.

Ordering Information

EasySeq™ NGS Library Prep Kits for Human Gene Sequencing, CE-IVD

Part Number	Description
RC-BRCA096-I	EasySeq™ *BRCA1/2 + CHEK2* HS Sequencing Kit *2 pools/sample, includes PCR Mastermix, 96 rxn*
RC-PALB096-I	EasySeq™ *PALB2* Sequencing Kit *2 pools/sample, includes PCR Mastermix, 96 rxn*
RC-TP53096-I	EasySeq™ *TP53* Sequencing Kit *2 pools/sample, includes PCR Mastermix, 96 rxn*

Unique Dual Index Plates for use with EasySeq™ Human Gene Sequencing Kits, CE-IVD

Part Number	Description
IDX096-U01D-I	2 x 96 Dried Unique Dual Indexes *Pre-spotted in 96-well plates. UDI# 0001 - 0096*
IDX096-U02D-I	2 x 96 Dried Unique Dual Indexes *Pre-spotted in 96-well plates. UDI# 0097 - 0192*

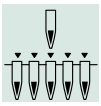
Note: Index (IDX) plates to be ordered separately

EasySeq™ RC-PCR workflow

1 Prepare the RC-PCR Master Mix

Combine the RC-PCR Probe Panel with 2x HiFi PCR Master Mix

2 Dispense and add DNA

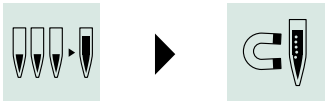


Dispense RC-PCR Master Mix in the pre-spotted Unique Dual Indexing tubes, followed by the addition of the sample DNA

3 RC-PCR

Combined Amplification and Indexing

4 NGS Library Clean-up



Single Tube Sample Pooling

Bead Clean-up and Size Selection

5 Sequence

Any Illumina® Sequencer

NimaGen.

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Product Name
EasySeq™ NGS Library Prep by Reverse Complement PCR for Human Gene Sequencing

Product Use
For *In Vitro* Diagnostic Use

Version 2.1 - March 2023