

QIAseq Targeted DNA Panels

Human BRCA1 and BRCA2 Plus

Cat. Nos. 333502 DHS-I03Z-I2 and 333505 DHS-I03Z-96

For ultrasensitive targeted next-generation sequencing (NGS) of DNA

The QIAseq Targeted DNA Human BRCA1 and BRCA2 Plus Panel permits the sequencing of the whole coding region of six key genes commonly mutated in human breast and ovarian cancer samples and involved in their development and progression. The panel covers 25,590 bases with 348 primers. Mutations in these oncogenes and tumor suppressor genes are often relevant for tumor classification, and warrant extensive investigation to enhance the understanding of carcinogenesis. Cancer is a heterogeneous disease, and each tumor subtype has a specific prognosis and molecular mechanism. These molecular mechanisms include point mutations, potentially rendering the gene of interest inactive or hyperactive. The genes sequenced in this panel are BRCA1, BRCA2, CDH1, PALB2, PTEN and TP53. Sequencing analysis of only these genes is an efficient method to examine more tumor samples in the sequencing run. This panel narrows the focus to the most relevant mutated genes in breast and ovarian cancer, as identified using a variety of resources such as recent whole genome/exome sequencing studies. Using digital DNA sequencing, SNP/indels in six key genes relevant to breast and ovarian cancer can be detected with this primer pool.

For further details, consult the *QIAseq Targeted DNA Panels Handbook*.

Shipping and storage

QIAseq Targeted DNA Panels (except Ligation Solution and QIAseq Beads) are shipped on dry ice and should be stored at -30 to -15°C in a constant-temperature freezer upon arrival. The QIAseq Beads and Ligation Solution are shipped on cold packs and should be stored at $2-8^{\circ}\text{C}$ except that the Ligation Solution should be removed immediately upon receipt and stored at -30 to -15°C in a constant-temperature freezer. The QIAseq Index kits are shipped on dry ice and should be stored at -30°C to -15°C upon arrival. When stored correctly, the QIAseq Index kits are good until the expiration date printed on the kit label.

Note: Open the package and store the products appropriately immediately upon receipt.



Panel Contents

| QIAseq Targeted DNA Panel Catalog Number | 333502 | 333505 |
|--|-------------|--------------|
| Number of samples | 12 | 96 |
| One pool of region-specific primers | 75 μ l | 600 μ l |
| Fragmentation Buffer, 10x | 40 μ l | 300 μ l |
| Fragmentation Enzyme Mix | 75 μ l | 600 μ l |
| FERA Solution | 15 μ l | 110 μ l |
| FG Solution | 170 μ l | 170 μ l |
| Ligation Buffer, 5x | 160 μ l | 1250 μ l |
| DNA Ligase | 75 μ l | 600 μ l |
| Ligation Solution | 125 μ l | 970 μ l |
| Nuclease-free Water | 1.5 ml | 10 ml |
| TEPCR Buffer, 5x | 60 μ l | 500 μ l |
| UPCR Buffer, 5x | 60 μ l | 500 μ l |
| HotStarTaq® DNA Polymerase | 30 μ l | 240 μ l |
| One bottle containing QIAseq Beads | 10 ml | 55 ml |

Gene Table

| Gene Symbol | Gene Symbol |
|-------------|-------------|
| BRCA1 | BRCA2 |
| CDH1 | PALB2 |
| PTEN | TP53 |

Functional Groupings

BRCA1 and BRCA2 Plus Panel: BRCA1, BRCA2, CDH1, PALB2, PTEN, TP53.

Ordering Information

| Product | Contents | Cat. no. |
|---|---|----------|
| QIAseq Targeted DNA Panel (12) | ALL reagents (except indexes) for targeted DNA sequencing; fixed panel for 12 samples; less than 200 genes | 333502 |
| QIAseq Targeted DNA Panel (96) | ALL reagents (except indexes) for targeted DNA sequencing; fixed panel for 96 samples; less than 200 genes | 333505 |
| QIAseq Targeted DNA HC Panel (12) | ALL reagents (except indexes) for targeted DNA sequencing; fixed panel for 12 samples; more than 200 genes | 333512 |
| QIAseq Targeted DNA HC Panel (96) | ALL reagents (except indexes) for targeted DNA sequencing; fixed panel for 96 samples; more than 200 genes | 333515 |
| QIAseq Targeted DNA Custom Panel (96) | ALL reagents (except indexes) for targeted DNA sequencing; Custom panel for 96 samples | 333525 |
| QIAseq Targeted DNA Extended Panel (96) | ALL reagents (except indexes) for targeted DNA sequencing; Extended panel for 96 samples | 333545 |
| QIAseq Targeted DNA Booster Panel (96) | Pool of primers used in combination with either cataloged or custom panels | 333535 |
| QIAseq Unique Dual Indices | | |
| QIAseq 96-Unique Dual Index Set A (384) | Box containing unique molecularly indexed adapters and primers, enough for a total of 384 samples, for indexing up to 96 samples for targeted panel sequencing on Illumina platforms; Set A (of A and B) required for multiplexing 192 samples in one run | 333725 |
| QIAseq 96-Unique Dual Index Set B (384) | Box containing unique molecularly indexed adapters and primers, enough for a total of 384 samples, for indexing up to 96 samples for targeted panel sequencing on Illumina platforms; Set A (of A and B) required for multiplexing 192 samples in one run | 333735 |
| QIAseq 8-Unique Dual Index Set A (48) | Box containing unique molecularly-indexed adapters and primers, enough for a total of 48 samples, for indexing up to 8 samples for targeted panel sequencing on Illumina platforms; Set A (of A and B) required for multiplexing 16 samples in one run | 333715 |

| Product | Contents | Cat. no. |
|--|--|----------|
| QIAseq 8-Unique Dual Index Set B (48) | Box containing unique molecularly-indexed adapters and primers, enough for a total of 48 samples, for indexing up to 8 samples for targeted panel sequencing on Illumina platforms; Set A (of A and B) required for multiplexing 16 samples in one run | 333716 |
| QIAseq Combinatorial Dual Indices | | |
| QIAseq 12-Index I (48) | Box containing molecularly indexed adapters and primers, enough for a total of 48 samples, for indexing up to 12 samples for targeted panel sequencing on Illumina platforms | 333714 |
| QIAseq 96-Index I Set A (384) | Box containing molecularly indexed adapters and primers, enough for a total of 384 samples, for indexing up to 96 samples for targeted panel sequencing on Illumina platforms; one of 4 sets required for multiplexing 384 samples | 333727 |
| QIAseq 96-Index I Set B (384) | Box containing molecularly indexed adapters and primers, enough for a total of 384 samples, for indexing up to 96 samples for targeted panel sequencing on Illumina platforms; 2 of 4 sets required for multiplexing 384 samples | 333737 |
| QIAseq 96-Index I Set C (384) | Box containing molecularly indexed adapters and primers, enough for a total of 384 samples, for indexing up to 96 samples for targeted panel sequencing on Illumina platforms; 3 of 4 sets required for multiplexing 384 samples | 333747 |
| QIAseq 96-Index I Set D (384) | Box containing molecularly indexed adapters and primers, enough for a total of 384 samples, for indexing up to 96 samples for targeted panel sequencing on Illumina platforms; 4 of 4 sets required for multiplexing 384 samples | 333757 |
| QIAseq Targeted DNA Indices for Ion Torrent platforms | | |
| QIAseq 12-Index L (48) | Box containing molecularly-indexed adapters and primers, enough for a total of 48 samples – for indexing up to 12 samples for targeted panel sequencing on Ion Torrent platforms | 333764 |
| QIAseq 96-Index L (384) | Box containing molecularly-indexed adapters and primers in arrays, enough for a total of 384 samples – for indexing up to 96 samples for targeted panel sequencing on Ion Torrent platforms | 333777 |

| Product | Contents | Cat. no. |
|--|--|----------|
| Related products | | |
| QIAseq Library Quant Array Kit | Reagents for quantification of libraries prepared for Illumina or Ion Torrent platforms; array format | 333304 |
| QIAseq Library Quant Assay Kit | Reagents for quantification of libraries prepared for Illumina or Ion Torrent platforms; assay format | 333314 |
| QIAseq DNA QuantiMIZE Array Kit | qPCR arrays for optimizing amount of input DNA and PCR cycling conditions for targeted enrichment of FFPE DNA | 333404 |
| QIAseq DNA QuantiMIZE Assay Kit | qPCR assays for optimizing amount of input DNA and PCR cycling conditions for targeted enrichment of FFPE DNA | 333414 |
| QIAamp DNA Mini Kit (50) | For 50 DNA preps: 50 QIAamp Mini Spin Columns, QIAGEN Proteinase K, Collection Tubes (2 ml), reagents and buffers | 51304 |
| QIAamp Circulating Nucleic Acid Kit (50) | For 50 DNA preps: QIAamp Mini Columns, Tube Extenders (20 ml), QIAGEN Proteinase K, Carrier RNA, Buffers, VacConnectors, and Collection Tubes (1.5 ml and 2 ml) | 55114 |
| QIAamp DNA FFPE Tissue Kit | For 50 DNA preps: 50 QIAamp MinElute Columns, Proteinase K, Buffers, Collection Tubes (2 ml) | 56404 |
| QIAamp DNA FFPE Advanced Kit | For 50 preps: QIAamp UCP MinElute Columns, collection tubes, Deparaffinization Solution, Proteinase K, RNase A, RNase-free water and buffers | 56604 |
| QIAamp DNA FFPE UNG Kit | For 50 preps: Uracil-N-glycosylase, QIAamp UCP MinElute columns, collection tubes, Deparaffinization Solution, Proteinase K, RNase A, RNase-free water and buffers | 56704 |

QIAseq Targeted DNA Panels are intended for molecular biology applications. These products are not intended for the diagnosis, prevention or treatment of a disease.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN® (QIAGEN Group)
1100784 02/2016 © 2016 QIAGEN, all rights reserved.

www.qiagen.com

Australia ■ 1-800-243-800

Austria ■ 0800/281010

Belgium ■ 0800-79612

Brazil ■ 0800-557779

Canada ■ 800-572-9613

China ■ 8621-3865-3865

Denmark ■ 80-885945

Finland ■ 0800-914416

France ■ 01-60-920-930

Germany ■ 02103-29-12000

Hong Kong ■ 800 933 965

Ireland ■ 1800 555 049

Italy ■ 800-787980

Japan ■ 03-6890-7300

Korea (South) ■ 080-000-7145

Luxembourg ■ 8002 2076

Mexico ■ 01-800-7742-436

The Netherlands ■ 0800 0229592

Norway ■ 800-18859

Singapore ■ 1800-742-4368

Spain ■ 91-630-7050

Sweden ■ 020-790282

Switzerland ■ 055-254-22-11

UK ■ 01293-422-911

USA ■ 800-426-8157



Sample to Insight