# Product Description
# SALSA® digitalMLPA™ Barcode Plate 3

**Version 03**
First commercial release.

**Catalogue number**
- **BP03-IL**: SALSA® digitalMLPA™ Barcode Plate 3 (barcode solution 193-288)

**Certificate of Analysis**
Information regarding quality tests is available upon request via info@mrcholland.com.

**General information**
SALSA® digitalMLPA™ Barcode Plate 3 contains barcode solutions that are used in SALSA® digitalMLPA™ reactions. Barcode Plate 3 is for research use only (RUO) and can only be used in combination with a digitalMLPA probemix and a SALSA® digitalMLPA™ Reagent Kit. The barcode plate lot should be compatible with the probemix, as indicated in the latest version of the probemix product description. When combining barcode solutions from multiple barcode plates in one experiment, the first two digits of the lot should be identical (e.g. "03").

**This product is not CE/FDA registered for use in diagnostic procedures. Purchase of this product includes a limited license for research purposes.**

## Table 1. Content

| Reagent | Volume | Ingredients |
|---|---|---|
| Barcode solution | 96 x 20 µl | Tris-HCl, non-toxic dyes and stabilizers, (synthetic) oligonucleotides. pH 8.5 |

## Table 2. Barcode solutions and dyes

| BP03-IL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 | 9 | 17 | 25 | 33 | 41 | 49 | 57 | 65 | 73 | 81 | 89 |
| B | 2 | 10 | 18 | 26 | 34 | 42 | 50 | 58 | 66 | 74 | 82 | 90 |
| C | 3 | 11 | 19 | 27 | 35 | 43 | 51 | 59 | 67 | 75 | 83 | 91 |
| D | 4 | 12 | 20 | 28 | 36 | 44 | 52 | 60 | 68 | 76 | 84 | 92 |
| E | 5 | 13 | 21 | 29 | 37 | 45 | 53 | 61 | 69 | 77 | 85 | 93 |
| F | 6 | 14 | 22 | 30 | 38 | 46 | 54 | 62 | 70 | 78 | 86 | 94 |
| G | 7 | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 87 | 95 |
| H | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 |

For sequences see Table 3.

The barcode solutions are distributed over the barcode plate in such a way that each row or column provides sufficient variation in each nucleotide read. Always use a full row or column of barcode solutions in each run in order to obtain sufficient complexity in each sequencing cycle. More information on run complexity is provided in the digitalMLPA General Protocol.

## Table 3. Barcode sequences

| # | Position | Sequence | Dye |
|---|---|---|---|
| BP03-01 | A01 | GTATCTTAAC | blue |
| BP03-02 | B01 | CACTGACTTG | blue |
| BP03-03 | C01 | CACATAGATG | blue |
| BP03-04 | D01 | AACCTCAGTT | blue |
| BP03-05 | E01 | CTATGAACAC | blue |
| BP03-06 | F01 | GATCAGTGAG | blue |
| BP03-07 | G01 | CTGAACCTCA | blue |
| BP03-08 | H01 | TGTCTCATAA | red |
| BP03-09 | A02 | ACCAGATCCT | blue |
| BP03-10 | B02 | CTTCTAAGTG | blue |
| BP03-11 | C02 | GATACCTCAA | blue |
| BP03-12 | D02 | CTATGTCTGT | blue |
| BP03-13 | E02 | CCTATAGAAG | blue |
| BP03-14 | F02 | CCAACTTGTG | blue |
| BP03-15 | G02 | CTGTCACAAT | blue |
| BP03-16 | H02 | TTGAGTCAAC | yellow |
| BP03-17 | A03 | CCATGTAGAG | blue |
| BP03-18 | B03 | CACCTTGATA | blue |
| BP03-19 | C03 | TCTTAGATTC | blue |
| BP03-20 | D03 | TGAACACCAG | blue |
| BP03-21 | E03 | AACCAGTGTG | blue |
| BP03-22 | F03 | TTAGACAAGA | blue |
| BP03-23 | G03 | CATGAGACTC | yellow |
| BP03-24 | H03 | ACTGACAATG | red |
| BP03-25 | A04 | TGTCACTACT | blue |
| BP03-26 | B04 | TGTAGAACAC | blue |
| BP03-27 | C04 | ACAGATAGAG | blue |
| BP03-28 | D04 | GTCTTATACC | blue |
| BP03-29 | E04 | TTCAAGTCCA | blue |
| BP03-30 | F04 | CTAGTGATTC | yellow |
| BP03-31 | G04 | AAGACCATCC | blue |
| BP03-32 | H04 | CAAGACCTTG | red |
| BP03-33 | A05 | TGTACTAAGA | blue |
| BP03-34 | B05 | ACATGTCCTA | blue |
| BP03-35 | C05 | GATTGTCAGT | blue |
| BP03-36 | D05 | GTACAAGTGT | blue |
| BP03-37 | E05 | AGTTCATACA | yellow |
| BP03-38 | F05 | ATGTTCCTCC | blue |
| BP03-39 | G05 | GTAACTGTAG | blue |
| BP03-40 | H05 | CAGACTCCAA | red |
| BP03-41 | A06 | GATAATACCA | blue |
| BP03-42 | B06 | TTAGTCCTTG | blue |
| BP03-43 | C06 | AGTACTGACT | blue |
| BP03-44 | D06 | CTTAGTCTAC | yellow |
| BP03-45 | E06 | GTGAGTTCAG | blue |
| BP03-46 | F06 | TCATGTTATG | blue |
| BP03-47 | G06 | CACACCTGTT | blue |
| BP03-48 | H06 | GTTCTAGTCA | red |

| # | Position | Sequence | Dye |
|---|---|---|---|
| BP03-49 | A07 | CTCCTGTACT | blue |
| BP03-50 | B07 | ACTCCTAGTT | blue |
| BP03-51 | C07 | TTGTCCACCA | yellow |
| BP03-52 | D07 | CTCTGATATG | blue |
| BP03-53 | E07 | ATGTTATCTG | blue |
| BP03-54 | F07 | TCAGTCAGTA | blue |
| BP03-55 | G07 | TCTGACAGTC | blue |
| BP03-56 | H07 | TAGATTCAAG | red |
| BP03-57 | A08 | TCATTGAATT | blue |
| BP03-58 | B08 | CATAATGTAC | yellow |
| BP03-59 | C08 | TTCACTGAAG | blue |
| BP03-60 | D08 | TAACCAAGTA | blue |
| BP03-61 | E08 | CAGTGTACAA | blue |
| BP03-62 | F08 | TGACATCATC | blue |
| BP03-63 | G08 | ACTTAGAACC | blue |
| BP03-64 | H08 | TTGTACTGAT | red |
| BP03-65 | A09 | TGAGAGACTC | yellow |
| BP03-66 | B09 | CCAGATTCAG | blue |
| BP03-67 | C09 | CAATTAGAAG | blue |
| BP03-68 | D09 | TCTCCAGTGA | blue |
| BP03-69 | E09 | ATACTTAGAC | blue |
| BP03-70 | F09 | TCAATATGAG | blue |
| BP03-71 | G09 | TATGATCTCC | blue |
| BP03-72 | H09 | ATCTAATGTT | red |
| BP03-73 | A10 | CACTGAATCC | blue |
| BP03-74 | B10 | CCTAATTGAT | yellow |
| BP03-75 | C10 | ACTGTGTTAA | yellow |
| BP03-76 | D10 | CTACTTGTTC | blue |
| BP03-77 | E10 | AATGTAACTA | blue |
| BP03-78 | F10 | ATGTCTTACT | blue |
| BP03-79 | G10 | TTCCTATGTT | blue |
| BP03-80 | H10 | TTATACAGTC | red |
| BP03-81 | A11 | TAGTAACCAG | blue |
| BP03-82 | B11 | CTTGTGAGTA | blue |
| BP03-83 | C11 | GTCCTCTAAC | yellow |
| BP03-84 | D11 | GTATACTTCT | yellow |
| BP03-85 | E11 | CACAGTGAAG | blue |
| BP03-86 | F11 | GACAGAGTAA | blue |
| BP03-87 | G11 | ATAGAACTGT | blue |
| BP03-88 | H11 | CTGACTGTAT | red |
| BP03-89 | A12 | ACATATTGTT | red |
| BP03-90 | B12 | GAAGTACTAC | red |
| BP03-91 | C12 | GACCTTCTCT | red |
| BP03-92 | D12 | TGATTCTATG | yellow |
| BP03-93 | E12 | TGTGTTCAAT | yellow |
| BP03-94 | F12 | ACCACATGTA | red |
| BP03-95 | G12 | GTGTGAACTG | red |
| BP03-96 | H12 | GACCTCCATA | yellow |

**Storage and shelf life**

Barcode plates must be stored at -15°C to -25°C shielded from light and in the original packaging directly upon arrival. After thawing, the plate contents should be mixed by repeated shaking/vortexing followed by brief centrifugation at a maximum of 1500 rpm.

Barcode plates can be stored at 4°C for a maximum of 3 months.

When stored at -15°C to -25°C, a shelf life of at least 1 year after the barcode plate was received, is guaranteed. See the labels on each plate for the exact expiry date. Barcode plates should not be exposed to more than 25 freeze-thaw cycles.

**Required materials**

- SALSA® digitalMLPA™ Probemix DXXX, where XXX stands for applicable catalogue number
- **DRK01-IL**: SALSA® digitalMLPA™ Reagent Kit, 100 reactions
- **DRK05-IL**: SALSA® digitalMLPA™ Reagent Kit, 500 reactions
- **DRK20-IL**: SALSA® digitalMLPA™ Reagent Kit, 2000 reactions

**Optional materials**

Extra domed cap strips to close the plate wells are available from Thermo Fisher (Thermo AB-0265 Domed 8 cap strips).

**Precautions and warnings**

For professional use only. Always consult the most recent barcode plate and probemix product description AND the digitalMLPA General Protocol before use.

The red colour of (some of) the barcode solutions can temporarily turn to yellow upon shipping on dry ice, as the red dye is also a pH indicator. This effect is easily reversible by using the barcode solutions in a digitalMLPA experiment.

**Related products**

- **BP01-IL**: SALSA® digitalMLPA™ Barcode Plate 1
- **BP02-IL**: SALSA® digitalMLPA™ Barcode Plate 2
- **BP04-IL**: SALSA® digitalMLPA™ Barcode Plate 4

These barcode plates each contain a different set of 96 barcode solutions that can be combined with the barcode solutions of this plate in one Illumina flow cell.

**digitalMLPA technique**

The principles of the digitalMLPA technique are described in the digitalMLPA General Protocol (www.mrcholland.com).

**Safety data sheet**

None of the ingredients are derived from humans, animals, or pathogenic bacteria. Based on the concentrations present, none of the ingredients are hazardous as defined by the Hazard Communication Standard. **A Safety Data Sheet (SDS) is not required for these products**: none of the preparations contain dangerous substances (as per Regulation (EC) No 1272/2008 [EU-GHS/CLP] and amendments) at concentrations requiring distribution of an SDS (as per Regulation (EC) No 1272/2008 [EU-GHS/CLP] and 1907/2006 [REACH] and amendments). If spills occur, clean with water and follow appropriate site procedures.

| **More information: www.mrcholland.com; www.mrcholland.eu** | |
|---|---|
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| **Implemented changes in the product description** |
| --- |
| *Version 02 – 14 September 2023*<br>- Added information on compatibility of barcode plate and probemix lots.<br>- Updated section Storage and shelf life.<br>- Added information on a Safety Data Sheet (SDS).<br>- Name of the product changed to SALSA digitalMLPA Barcode Plate 3.<br>- Minor textual changes.<br>*Version 01 – 23 August 2021*<br>- Not applicable, new document. |