

Product Description

NXtec™ Barcode Plate 3

Version 03

First commercial release.

Catalogue number

- **BP03-IL:** NXtec Barcode Plate 3 (barcode solution 193-288)

Certificate of Analysis

Information regarding quality tests is available upon request via info@mrcholland.com.

General information

NXtec Barcode Plate 3 contains barcode solutions that are used in NXtec reactions. Barcode Plate 3 is for **research use only (RUO)** and can only be used in combination with a NXtec probemix and a NXtec 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 NXtec 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	CCAACCTGTG	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	CTAGTGATTG	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	ATGTTCTCTC	blue
BP03-39	G05	GTAAGTGTAG	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	TTCAGTGAAG	blue
BP03-60	D08	TAACCAAGTA	blue
BP03-61	E08	CAGTGTACAA	blue
BP03-62	F08	TGACATCATC	blue
BP03-63	G08	ACTTAGAACCC	blue
BP03-64	H08	TTGTACTGAT	red
BP03-65	A09	TGAGAGACTC	yellow
BP03-66	B09	CCAGATTGAG	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	CTACTTGTTT	blue
BP03-77	E10	AATGTAACTA	blue
BP03-78	F10	ATGTCTTACT	blue
BP03-79	G10	TTCTATGTT	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	GTGTGAAGTG	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

- NXtec DXXX, where XXX stands for applicable probemix catalogue number
- **DRK01-IL**: NXtec Reagent Kit, 100 reactions
- **DRK05-IL**: NXtec Reagent Kit, 500 reactions
- **DRK20-IL**: NXtec 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 NXtec 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**: NXtec Barcode Plate 1
- **BP02-IL**: NXtec Barcode Plate 2
- **BP04-IL**: NXtec 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 NXtec 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.

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Implemented changes in the product description

Version 03 – 17 July 2025

- Product names were updated throughout the document from SALSA® digitalMLPA™ to NXtec.

Version 02 – 14 September 2023

- Added information on compatibility of barcode plate and probemix lots.
- Updated section Storage and shelf life.
- Added information on a Safety Data Sheet (SDS).
- Name of the product changed to SALSA digitalMLPA Barcode Plate 3.
- Minor textual changes.

Version 01 – 23 August 2021

- Not applicable, new document.