

Product Description

NXtec™ Barcode Plate 1

Version 03

First commercial release.

Catalogue number

- **BP01-IL:** NXtec Barcode Plate 1 (barcode solution 1-96)

Certificate of Analysis

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

General information

NXtec Barcode Plate 1 contains barcode solutions that are used in NXtec reactions. Barcode Plate 1 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

BP01-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
BP01-01	A01	AAGTCAAGTC	yellow
BP01-02	B01	TCAGATGTAG	yellow
BP01-03	C01	TCCTCAGACT	yellow
BP01-04	D01	TTGTAGTCTT	yellow
BP01-05	E01	CACTTATGTC	yellow
BP01-06	F01	AGATACATCC	yellow
BP01-07	G01	GTTATAACTG	yellow
BP01-08	H01	ACAAC TAGTA	red
BP01-09	A02	ATGACATACC	yellow
BP01-10	B02	TCCAGTATTG	yellow
BP01-11	C02	AACTGTTCTT	yellow
BP01-12	D02	GTAATCTCTC	yellow
BP01-13	E02	TTGTCATATG	yellow
BP01-14	F02	GTTGTGACAG	yellow
BP01-15	G02	AGATCAGATT	yellow
BP01-16	H02	CTGATATTGT	blue
BP01-17	A03	CAGTCAATTG	yellow
BP01-18	B03	CTTCCTAGAA	yellow
BP01-19	C03	AACAGTTAAC	yellow
BP01-20	D03	TTGATCTGTG	yellow
BP01-21	E03	AACTGAGAAG	yellow
BP01-22	F03	GACTAGAATT	yellow
BP01-23	G03	AGAACTTCAT	blue
BP01-24	H03	ATGTACTTGT	red
BP01-25	A04	CTGTATTACA	yellow
BP01-26	B04	GACTAATAGT	yellow
BP01-27	C04	GACCATACCT	yellow
BP01-28	D04	TATAGTCACC	yellow
BP01-29	E04	ACAGTAATAA	yellow
BP01-30	F04	ACATGTATTC	blue
BP01-31	G04	TTCTGATTCT	yellow
BP01-32	H04	CATCTGTTCC	red
BP01-33	A05	GACCAAGTTA	yellow
BP01-34	B05	CCAAGTGAAG	yellow
BP01-35	C05	GTAGACCATG	yellow
BP01-36	D05	TGTCAAGTTA	yellow
BP01-37	E05	CTTAACTGAC	blue
BP01-38	F05	ACAATGACTA	yellow
BP01-39	G05	GTCTGACACA	yellow
BP01-40	H05	GATGAATCTT	red
BP01-41	A06	CTCAGAGTTG	yellow
BP01-42	B06	ACCTAAGACC	yellow
BP01-43	C06	ACATTCAGTT	yellow
BP01-44	D06	TATCAGAAGA	blue
BP01-45	E06	CAGATTATAT	yellow
BP01-46	F06	GTTACTTGAT	yellow
BP01-47	G06	GTGTATCAGA	yellow
BP01-48	H06	GTCTCTGATC	red

#	Position	Sequence	Dye
BP01-49	A07	CATTGTAACC	yellow
BP01-50	B07	GATATTCCTT	yellow
BP01-51	C07	AATATGTCTC	blue
BP01-52	D07	CTAAGAATCC	yellow
BP01-53	E07	CAACATGACC	yellow
BP01-54	F07	TTGTTATCCA	yellow
BP01-55	G07	CACATCTGAC	yellow
BP01-56	H07	CTTGATTAAG	red
BP01-57	A08	TATGACTATT	yellow
BP01-58	B08	ATCAGACCAC	blue
BP01-59	C08	CTAATGAGTG	yellow
BP01-60	D08	CCATAGTTCT	yellow
BP01-61	E08	AGAAGTCAGT	yellow
BP01-62	F08	AGTTAGACTC	yellow
BP01-63	G08	GACCTTAATG	yellow
BP01-64	H08	CTGACTAACC	red
BP01-65	A09	CCAGTACAAC	blue
BP01-66	B09	CCTTGACTAT	yellow
BP01-67	C09	GTCCAGTTCT	yellow
BP01-68	D09	GAATACAGTT	yellow
BP01-69	E09	GATTATCTAC	yellow
BP01-70	F09	GTTATATCCA	yellow
BP01-71	G09	AGACCACTGA	yellow
BP01-72	H09	TGAGATTCTT	red
BP01-73	A10	CCATATGTGA	yellow
BP01-74	B10	ATTGAGACCT	blue
BP01-75	C10	TGATAACTTA	blue
BP01-76	D10	CATTATTGAC	yellow
BP01-77	E10	ACTAAGATTG	yellow
BP01-78	F10	GTTGTTCACT	yellow
BP01-79	G10	GAGACTTATT	yellow
BP01-80	H10	ACTTGAATAC	red
BP01-81	A11	AACTCCTGAT	yellow
BP01-82	B11	GTATAATCAA	yellow
BP01-83	C11	CTTCAGTAAC	blue
BP01-84	D11	GAGAACTAGA	blue
BP01-85	E11	TCCTTGTAAG	yellow
BP01-86	F11	TCCTCTAGTT	yellow
BP01-87	G11	ACTACTGTGA	yellow
BP01-88	H11	CCTGTACCTA	red
BP01-89	A12	GTAAAGACAT	red
BP01-90	B12	CAGATAACAC	red
BP01-91	C12	ATGTCTAGAG	red
BP01-92	D12	TGACTCTGAG	blue
BP01-93	E12	TTCTGATGAA	blue
BP01-94	F12	CTAACAGTTC	red
BP01-95	G12	TAATTGACTG	red
BP01-96	H12	ATATGACAGA	blue

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

- **BP02-IL**: NXtec Barcode Plate 2
- **BP03-IL**: NXtec Barcode Plate 3
- **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.

More information: www.mrcholland.com ; www.mrcholland.eu	
	MRC Holland BV; Willem Schoutenstraat 1 1057 DL, Amsterdam, The Netherlands
E-mail	info@mrcholland.com (information & technical questions); order@mrcholland.com (orders)
Phone	+31 888 657 200

Implemented changes in the product description

Version 06 – 17 July 2025

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

Version 05 – 14 September 2023

- Added information on compatibility of barcode plate and probemix lots.
- Updated section Storage and shelf life.
- Added SALSA digitalMLPA Barcode Plates 3 and 4 to the list of related products.
- Added information on a Safety Data Sheet (SDS).
- Name of the product changed to SALSA digitalMLPA Barcode Plate 1.
- Minor textual changes.