

Product Description

NXtec™ Barcode Plate 2

Version 03

First commercial release.

Catalogue number

- **BP02-IL:** NXtec Barcode Plate 2 (barcode solution 97-192)

Certificate of Analysis

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

General information

NXtec Barcode Plate 2 contains barcode solutions that are used in NXtec reactions. Barcode Plate 2 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

BP02-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
BP02-01	A01	TGTCCTTATC	yellow
BP02-02	B01	GTACAGTAAG	yellow
BP02-03	C01	CAATCAGTCC	yellow
BP02-04	D01	ACCTAGAGTT	blue
BP02-05	E01	TGATCCATCT	blue
BP02-06	F01	GAGTTAACAT	yellow
BP02-07	G01	ACTGTCTCCA	yellow
BP02-08	H01	GACAGTCCAA	red
BP02-09	A02	AGTCTGAAGA	yellow
BP02-10	B02	ACAGACATTA	yellow
BP02-11	C02	GAATCATACA	yellow
BP02-12	D02	TGTACACCTC	yellow
BP02-13	E02	CCAGTTACTG	blue
BP02-14	F02	TCAGTCTTCT	blue
BP02-15	G02	TCTAGAATGA	yellow
BP02-16	H02	GTACTACAAC	red
BP02-17	A03	AAGACTAACT	yellow
BP02-18	B03	AGTTACAGAA	yellow
BP02-19	C03	GAGTCCATTC	yellow
BP02-20	D03	TCCAGTTAAG	yellow
BP02-21	E03	TCTTGTATCC	yellow
BP02-22	F03	CAGAGTCATT	blue
BP02-23	G03	TGACAATAAC	blue
BP02-24	H03	ACATTAAGAG	red
BP02-25	A04	CTTATGAATT	yellow
BP02-26	B04	GAATAACTCT	yellow
BP02-27	C04	ATTCAATGAG	yellow
BP02-28	D04	TGTATTCTCC	blue
BP02-29	E04	GAAGTCTTGT	blue
BP02-30	F04	CATCCAAGTC	blue
BP02-31	G04	CCATTGTCCA	yellow
BP02-32	H04	CTGAGATAAG	red
BP02-33	A05	TCCAATAGTA	yellow
BP02-34	B05	CTGTTCAACC	yellow
BP02-35	C05	ACTCTTGTCC	blue
BP02-36	D05	TACTTCTGTA	blue
BP02-37	E05	GAGATGTCAC	blue
BP02-38	F05	GAATTGTCCT	yellow
BP02-39	G05	TAACATTGAG	yellow
BP02-40	H05	AGAGATCACT	red
BP02-41	A06	TGTAATTCAG	yellow
BP02-42	B06	CTGAAGTTAT	blue
BP02-43	C06	TGTCAGATCT	blue
BP02-44	D06	CTGTTACTTC	blue
BP02-45	E06	GTCATTCATG	yellow
BP02-46	F06	AGTATACCTG	yellow
BP02-47	G06	TAACAGAATT	yellow
BP02-48	H06	GAAGAGTCTC	red

#	Position	Sequence	Dye
BP02-49	A07	AGTCCAACATA	blue
BP02-50	B07	CCTTGTTACA	blue
BP02-51	C07	CCAAGTGTTT	blue
BP02-52	D07	CAGACCATAG	yellow
BP02-53	E07	GAACAATCCT	yellow
BP02-54	F07	ATTCCTGTCT	yellow
BP02-55	G07	AGATCTCTAC	yellow
BP02-56	H07	TGACATGTTG	red
BP02-57	A08	ATTGTTCTAA	yellow
BP02-58	B08	ACAAGTTCAC	blue
BP02-59	C08	TTGAACCACT	yellow
BP02-60	D08	GTTCCAGATA	blue
BP02-61	E08	TGAACATTA	yellow
BP02-62	F08	AGTGAACAGT	yellow
BP02-63	G08	AATCCTTGTG	yellow
BP02-64	H08	CACTACAGAG	red
BP02-65	A09	TGTTCTGAAC	yellow
BP02-66	B09	CCTATTAGTG	yellow
BP02-67	C09	GTTGTCCAAG	blue
BP02-68	D09	GTCCATGTGA	yellow
BP02-69	E09	TAGACACACA	blue
BP02-70	F09	TTAATGTCTA	yellow
BP02-71	G09	ACTCCAGAAT	yellow
BP02-72	H09	GTAAGAAGTT	red
BP02-73	A10	ACAAGTGAGA	yellow
BP02-74	B10	TGTGTGACCA	yellow
BP02-75	C10	AGTCACTCAA	yellow
BP02-76	D10	ACCTAGTCAC	blue
BP02-77	E10	TTACACTGTG	yellow
BP02-78	F10	TCATAAGTTG	blue
BP02-79	G10	GAGTCAATAA	yellow
BP02-80	H10	TAGAATACTC	red
BP02-81	A11	CTCATGATCC	yellow
BP02-82	B11	GAATTCCACT	yellow
BP02-83	C11	CAGTACTATC	yellow
BP02-84	D11	AGTAATCATG	yellow
BP02-85	E11	ATCATGTGTG	blue
BP02-86	F11	TATCTGTTAT	yellow
BP02-87	G11	CCTCAATGTC	blue
BP02-88	H11	TTGACTACAT	red
BP02-89	A12	CCAGTCTTAA	red
BP02-90	B12	TTATAGACCA	red
BP02-91	C12	TAGAGAACCT	red
BP02-92	D12	GTACCTCTTG	red
BP02-93	E12	CAGAGATGTT	red
BP02-94	F12	TCTTATTGTC	blue
BP02-95	G12	CATGAAGAAG	yellow
BP02-96	H12	TATATCTGAT	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 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
- **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	
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Implemented changes in the product description

Version 05 – 07 November 2025

- Sequence of barcode BP02-50 has been updated.

Version 04 – 17 July 2025

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

Version 03 – 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 2.
- Minor textual changes.