

# Product Description SALSA® Binning DNA SD030-S01

#### **Version S01**

#### Catalogue number

• SD030: SALSA Binning DNA, 6 reactions

## **Precautions and warnings**

For professional use only. Always consult the most recent product description AND the corresponding probemix product description AND the MLPA General Protocol before use: www.mrcholland.com. Binning DNA is not known to contain any harmful agents.

#### Safety data sheet

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.

#### **General information**

The SALSA Binning DNA SD030 is a research use only (RUO) reagent to be used in combination with SALSA MLPA probemixes P116-B2 SGC, P199-B3 HEXA, P255-B1 ALDOB-FBP1, P285-C3 LRP5, P305-B3 AGXT, a SALSA MLPA Reagent Kit and Coffalyser.Net™ analysis software for the processes of linking all probe signals to their identity by use of the probe lengths. SD030 contains the targets of all probes included in the above-listed probemixes, including the mutation-specific probe targets *AGXT* c.33\_34insC, c.508G>A and c.731T>C, *ALDOB* c.448G>C and c.524C>A, *FKRP* c.826C>A (L276I), *HEXA* c.1278insTATC and IVS12+1G>C and *LRP5* c.512G>T (G171V).

Binning DNA should never be used as a reference sample in the MLPA data analysis. Neither should it be used in quantification of mutation signals.

# **Experimental set up**

MLPA reactions for binning purposes should be performed with  $5\,\mu$ l of Binning DNA. Inclusion of one reaction with SALSA Binning DNA SD030 in the initial MLPA experiment is essential as it can aid in data binning of the peak pattern when using Coffalyser.Net software. Furthermore, Binning DNA should be included in the experiment whenever changes have been applied to the set-up of the capillary electrophoresis device (e.g. when a different polymer type is used).

#### **Data analysis**

Coffalyser.Net software should be used for analysis of MLPA experiments. When performing the fragment analysis step in Coffalyser.Net, select SD030 in the *bin smpl* –column. By selecting the SD030 sample as your binning sample, probes will be correctly identified in the peak pattern across all samples. Coffalyser.Net software is freely downloadable at <a href="https://www.mrcholland.com">www.mrcholland.com</a>.

# **Binning DNA content**

SD030 consists of a mixture of female genomic DNA from healthy individuals and a titrated amount of plasmid DNA that contains partial sequences of the *AGXT*, *ALDOB*, *FKRP*, *HEXA* and *LRP5* genes. These partial sequences include nine different mutations that will be detected by the mutation-specific probes present in the above-listed probemixes. See Table 1 and the corresponding probemix product descriptions for more details on mutation-specific probe targets present. The indicated mutation-specific probes will generate a signal on SD030.

Please note that the plasmid DNA also contains the target sequence of the 105 nt chromosome Y specific control fragment. As a result, the 100 and 105 nt control fragments indicate the presence of two copies chromosome X and one copy chromosome Y.

SALSA Binning DNA SD030





Table 1. Mutation-specific probe targets in Binning DNA SD030-S01

Probemix	Gene/Exon	Probe length (nt)	Probe ID	Probemix version	Details
P116	FKRP exon 4	259	11373-L13479	B2	c.826C>A; L276I
P199	HEXA exon 11	166	06722-L06309	В3	c.1278insTATC; p.Tyr427llefs
	HEXA exon 12	172	06724-L06312		IVS12+1G>C
P255	ALDOB exon 5	328	08669-L08680	B1	c.448G>C; A149P
	ALDOB exon 5	355	08670-L08682		c.524C>A; A174D
P285	LRP5 exon 3	202	09270-SP0044-L09500	C3	c.512G>T; G171V
P305	AGXT exon 1	264	21829-L32675	B3	c.33_34insC; p.Lys12GlnfsX156
	AGXT exon 4	283	09740-L10150		c.508G>A; p.G170R
	AGXT exon 7	231	09743-L32674		c.731T>C; p.I244T

**Note:** Please consult the corresponding probemix product description for more information about exon numbering, mutation nomenclature and gene transcripts used.

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 S01-10 - 02 September 2025 (03)

- Information about P305-B2 probemix removed.
- Mutation details listed in 'General information' section updated.
- Mutation details updated in Table 1.

Version S01-09 - 03 June 2022 (03)

- Information about P305-B3 probemix added to General information and Table 1.

Version S01-08 - 13 December 2021 (03)

- Product description rewritten and adapted to a new template.
- Information about P116-B1 and P199-B2 probemixes removed.
- Various minor textual changes.

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