Product Description
SALSA® Binning DNA SD089-S01

Version S01

Catalogue number
- **SD089:** SALSA Binning DNA, 6 reactions

Certificate of Analysis
Information regarding storage conditions, quality tests, and a sample electropherogram from the current sales lot is available at www.mrcholland.com.

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.

Intended purpose
The SALSA Binning DNA SD089 is an in vitro diagnostic (IVD)[1] or research use only (RUO) reagent to be used in combination with SALSA MLPA Probemix P438-D3 Celiac Disease, 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. SD089 contains the targets of all probes included in the above-listed probemix, including the allele-specific probe targets *HLA-DQA1*02*, *HLA-DQA1*03*, *HLA-DQA1*05*, *HLA-DQB1*02*, *HLA-DQB1*03*, *HLA-DQB1*0302 *0303* and *HLA-DQB1*0302 *0305*.

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

[1]Please note that this Binning DNA is for in vitro diagnostic (IVD) use in the countries specified at the end of this product description. In all other countries, the product is for research use only (RUO).

Experimental set up
MLPA reactions for binning purposes should be performed with 5 µl of Binning DNA. Inclusion of one reaction with SALSA Binning DNA SD089 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 SD089 in the *bin smpl* –column. By selecting the SD089 sample as your binning sample, probes will be correctly identified in the peak pattern across all samples. Coffalyser.Net software is freely downloadable at www.mrcholland.com.

Binning DNA content
SD089 consists of a mixture of female genomic DNA purified from a selected cell line and a titrated amount of plasmid DNA that contains partial sequences of the *HLA-DQA1* and *HLA-DQB1* genes. SD089 contains the target sequences that will be detected by the 11 HLA-DQ allele-specific probes present in the above-listed probemix. See Table 1 and the corresponding probemix product description for more details on allele-specific probe targets present. The indicated allele-specific probes will generate a signal on SD089.

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.

Table 1. HLA-DQ allele-specific probe targets in Binning DNA SD089-S01

Probemix	Gene/Exon	Probe length (nt)	Probe ID	Probemix version	Details
P438	*HLA-DQA1* exon 2	178	11289-L12015	D3	DQA1*03: DQ8
	HLA-DQA1 exon 2	222	19115-L25062	D3	DQA1*02: DQ2.2
	HLA-DQA1 exon 2	144	S0371-SP0074-L12959	D3	DQA1*03: DQ8
	HLA-DQA1 exon 2	202	11292-L12018	D3	DQA1*05: DQ2.5
	HLA-DQA1 exon 3	332	11293-L12019	D3	DQA1*05: DQ2.5
	HLA-DQA1 exon 4	287	22800-SP0747-L25064	D3	DQA1*02: DQ2.2
	HLA-DQB1 exon 4	184	11296-L12022	D3	DQB1*02: DQ2.5, DQ2.2
	HLA-DQB1 exon 2	229	20917-SP0075-L12960	D3	DQB1*03: DQ8
	HLA-DQB1 exon 2	136	S0460-SP0135-L15177	D3	DQB1*0302 *0305: DQ8
	HLA-DQB1 exon 2	319	11295-L12021	D3	DQB1*02: DQ2.5, DQ2.2
	HLA-DQB1 exon 2	256	23049-SP0849-L32517	D3	DQB1*0302 *0303: DQ8

Note: Please consult the corresponding probemix product description for more information about exon numbering, HLA-DQ allele nomenclature and gene transcripts used.

More information: www.mrcholland.com; www.mrcholland.eu	
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IVD	EUROPE* CE
RUO	ALL OTHER COUNTRIES

*comprising EU (candidate) member states and members of the European Free Trade Association (EFTA), and the UK. The product is for RUO in all other European countries.

Implemented changes in the product description
Version S01-01 – 13 October 2022 (03) - Not applicable, new document.