Product Description
SALSA® Binning DNA SD054-S02

Version S02
As compared to version S01, plasmid DNA is used instead of synthetic DNA.

Catalogue number
- **SD054:** 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 SD054 is a research use only (RUO) reagent to be used in combination with SALSA MLPA probemixes P088-D1 Oligodendroglioma 1p-19q and P370-C1 BRAF-IDH1-IDH2, 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. SD054 contains the targets of all probes included in the above-listed probemixes, including the mutation-specific probe targets *BRAF* p.V600E (c.1799T>A), *IDH1* p.R132H (c.395G>A) and p.R132C (c.394C>T) and *IDH2* p.R172M (c.515G>T) and p.R172K (c.515G>A).

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 µl of Binning DNA. Inclusion of one reaction with SALSA Binning DNA SD054 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 SD054 in the *bin smpl* –column. By selecting the SD054 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
SD054 consists of a mixture of female genomic DNA from healthy individuals and a titrated amount of plasmid DNA that contains partial sequences of the *BRAF*, *IDH1* and *IDH2*. These partial sequences include five 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 SD054.

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. Mutation-specific probe targets in Binning DNA SD054-S02

Probemix	Gene/Exon	Probe length (nt)	Probe ID	Probemix version	Details
P088	*IDH1* exon 6	203	19529-L16492	D1	c.395G>A; p.R132H
	IDH1 exon 6	227	14787-L23353		c.394C>T; p.R132C
	IDH2 exon 5	244	20963-L29001		c.515G>T; p.R172M
	IDH2 exon 5	238	20963-L29002		c.515G>A; p.R172K
P370	*IDH1* exon 6	203	19529-L16492	C1	c.395G>A; p.R132H
	IDH1 exon 6	220	14787-L16493		c.394C>T; p.R132C
	BRAF exon 15	226	08780-SP0039-L08904		c.1799T>A; p.V600E
	IDH2 exon 5	244	20963-L29001		c.515G>T; p.R172M
	IDH2 exon 5	238	20963-L29002		c.515G>A; p.R172K

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	
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Implemented changes in the product description

Version S02-03 – 20 January 2026 (03)
- Information about P088-D1 probemix added to general information and Table 1.

Version S02-02 – 09 May 2025 (03)
- Product description rewritten and adapted to a new template.
- Information about ME012 probemix in “General information” section and in Table 1 removed.

Version S02-01 – 17 March 2021 (15)
- Product description adapted to a new version of SD054.
- Details about SD054 adjusted: plasmid DNA used instead of synthetic DNA.
- Information about P088-C probemix removed.