Product Description
SALSA® Binning DNA SD094-S01

Version S01

Catalogue number
- **SD094:** 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 or the MS-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 SD094 is a research use only (RUO) reagent to be used in combination with SALSA (MS-)MLPA probemix ME012-B1 MGMT-IDH-TERT, a SALSA MLPA Reagent Kit, SALSA HhaI and Coffalyser.Net™ analysis software for the processes of linking all probe signals to their identity by use of the probe lengths. SD094 contains the targets of all probes included in the above-listed probemix, including the mutation-specific probe targets: *IDH1* p.R132H (c.395G>A) and p.R132C (c.394C>T), *IDH2* p.R172K (c.515G>A) and p.R172M (c.515G>T), and *TERT* promoter C228T and C250T.

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 SD094 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 SD094 in the *bin smpl* –column. By selecting the SD094 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
SD094 consists of a mixture of female genomic DNA from healthy individuals and a titrated amount of plasmid DNA that contains partial sequences of the *IDH1*, *IDH2* and *TERT* genes. These partial sequences include six different mutations that will be detected by the mutation-specific probes present in the above-listed probemix. See Table 1 and the corresponding probemix product description for more details on mutation-specific probe targets present. The indicated mutation-specific probes will generate a signal on SD094.

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 SD094-S01

Probemix	Gene/Exon	Probe length (nt)	Probe ID	Probemix version	Details
ME012	*IDH1* exon 6	203	19529-L16492	B1	p.R132H; c.395G>A
	IDH1 exon 6	232	19926-L32919	B1	p.R132C; c.394C>T
	IDH2 exon 5	151	20643-L32911	B1	p.R172K; c.515G>A
	IDH2 exon 5	154	20643-L32910	B1	p.R172M; c.515G>T
	TERT promoter	127	S1295-L32988	B1	C250T
	TERT promoter	146	S1309-L32882	B1	C228T

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 S01-02 – 26 April 2023 (03) - Probe ID adjusted for the TERT-promoter probes in Table 1 *Version S01-01 – 27 March 2023 (03)* - Not applicable, new document.