

Product Description SALSA® Binning DNA SD067-S01

Version S01.

Catalogue number: SD067: SALSA® Binning DNA, 6 reactions

To be used with the following SALSA MLPA probemixes: P045-C1 BRCA2/CHEK2, P056-D1 TP53, P051-D2/P052-D2 Parkinson and P102-D1 HBB, in combination with a SALSA® MLPA® reagent kit, available for various number of reactions. MLPA reagent kits are either provided with FAM or Cy5.0 dye-labelled PCR primer, suitable for Applied Biosystems and Beckman capillary sequencers, respectively (see www.mlpa.com).

Certificate of Analysis: Information regarding storage conditions, quality tests, and a sample electropherogram from the current sales lot is available at www.mlpa.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.mlpa.com. It is the responsibility of the user to be aware of the latest scientific knowledge of the application before drawing any conclusions from findings generated with this product.

Intended use: This SD067 DNA is a Binning DNA sample for the MLPA probemix versions as specified above and in Table 1. See Table 1 and the corresponding probemix product description for more details on the mutation-specific probe target present. Binning and filtering are the processes of linking a signal to its probe identity by use of the probe length.

Please note that this Binning DNA is a mixture of female genomic DNA from healthy individuals and artificial DNA of 50-80 nt length not covering the whole exon.

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 SD067 in the initial MLPA experiment is essential as it can aid in data binning of the peak pattern 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 must be used for analysis of MLPA experiments. When performing the fragment analysis step in Coffalyser.Net, select SD067 in the *bin smpl*-column. By selecting the SD067 sample as your binning sample, probes will be correctly identified in the peak pattern across all patient samples. Coffalyser.Net software is available free of charge on www.mlpa.com.

Warning: Binning DNA should never be used as a reference sample in the MLPA data analysis. Neither should it be used in quantification of mutation signal(s), as for this purpose true mutation/SNP positive patient samples or cell lines should be used. It is strongly advised to use sample and reference DNA extracted with the same method and derived from the same source of tissue.

Binning DNA content: MRC-Holland is unable to provide mutation positive human DNA samples. As an alternative, we have prepared a mixture of female genomic DNA from healthy individuals and a titrated amount of plasmid DNA that contains the target sequences recognised by the mutation-specific probes present in the MLPA probemix versions as specified above and in Table 1.

The plasmid DNA included in the SD067 DNA contains partial sequences of the *CHEK2*, *LRRK2*, *SNCA*, and *HBB* genes. These sequences include four mutations which will be detected by MLPA probes that are present in the aforementioned probemix versions (for details, see Table 1) and will generate a mutation-specific signal for these probes.

Please note that the plasmid DNA contains the target sequence detected by the above mentioned probes and the sequence of the 105 nt chromosome Y specific control fragment. The amount of plasmid in this Binning DNA (relative to the genomic DNA) results in a relative probe signal for the 105 nt probe on this female DNA which is similar to the relative probe signal obtained on male DNA samples. As a result, the 100

and 105 nt control fragments indicate the presence of two copies chromosome X and one copy chromosome Y.

Storage and stability: Upon arrival, Binning DNA must be stored between -25 °C and -15 °C, in the original packaging. When stored under the recommended conditions, a shelf life of at least 1 year is guaranteed, also after opening. The expiry date is mentioned on the label of the vial.

Table 1. Mutation-specific probe targets in SD067-S01 Binning DNA

Probemix	Gene/Exon	Probe length	Probe ID	Present in probemix version	Details
P045	CHEK2 exon 11	490 nt	01772-L01336	C1	1100delC
P051	SNCA exon 2	154 nt	02166-L27543	D2	c.88G>C; p.A30P
	LRRK2 exon 41	196 nt	04575-L27549	D2	c.6055G>A; p.G2019S
P052	LRRK2 exon 41	172 nt	04574-L27601	D2	c.6055G>A; p.G2019S
P056	CHEK2 exon 11	208 nt	18318-L26751	D1	1100delC
P102	HBB exon 1	214 nt	21234-L29609	D1	c.20A>T; p.Glu7Val

Note: Mutation nomenclature and exon numbering used here may differ from literature! Please notify us of any mistakes: info@mlpa.com. Please consult the respective probemix product description to find corresponding gene transcripts.

More information: www.mlpa.com; www.mlpa.eu

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*EUROPE:



* comprising EU member states, EU member state candidates and members of the European Free Trade Association (EFTA).

OUTSIDE EUROPE:



The product is for RUO in all other countries within Europe

Implemented Changes – compared to the previous SD067 product description versions

Version S01-03 – 28 August 2018 (01)

- Information added on P051-D2/P052-D2 and P102-D1 to be used with SD067.
- Table 1 modified to include details about the additional targets on SD067.
- Minor textual adjustments.

Version S01-02 – 04 July 2018 (01)

- Information added on P056-D1 to be used with SD067.
- Table 1 modified to include details about the additional target on SD067.
- Minor textual adjustments.

Version S01-01 – 12 December 2016 (01)

- Not applicable, new document.