

PRODUCT INFORMATION

v.3 MuA Transposase (in vivo Integrator)

Cat. No. D010301

Format: 10 µl

Concentration: 400 ng/µl

Description

Domus v.3 MuA Transposase (in vivo Integrator) is a hyperactive MuA transposase variant with a superior performance especially in genomic integration assays.

Storage conditions

Store at -20°C. Guaranteed stable for 12 months when properly stored.

Storage buffer

25 mM HEPES pH7.6, 0.1 mM EDTA, 1 mM DTT, 50% (w/v) glycerol, 500 mM KCl

Activity of v.3 MuA Transposase (in vivo Integrator) was determined using *in vitro* assembly of Mu transpososomes and electroporation of Mu transpososomes into *E. coli*. Reactions (20 µl) contained 1.1 pmol Cat-Mu Transposon (CamR) (Cat. No. D020101), and 4.9 pmol (0.4 µg) v.3 MuA Transposase in 1X reaction buffer (150mM Tris pH 6, 0.025% Triton™ X-100, 150 mM NaCl, 0.1mM EDTA, 50% glycerol). Reactions were carried out for 2 hours at 30°C. To reduce the salt concentration transpososome preparations were diluted 1:8 with water before electroporation. An aliquot (1 µl) was electrotransformed into *E. coli* electrocompetent cells (25 µl) (transformation efficiency > 10¹⁰ cfu/µg pUC19). Dilutions of the transformation mixture were plated onto LB plates containing Cm (10 µg/ml) to score integration products. As a result, more than 10⁶ colonies were recovered per single transposition reaction.

Citation

Please cite the product in the following manner:

v.3 MuA Transposase (in vivo Integrator) (Domus Biotechnologies)

Rasila, T.S., Pulkkinen, E., Kiljunen, S., Haapa-Paananen, S., Pajunen, M.I., Salminen, A., Paulin, L., Vihinen, M., Rice, P.A. and Savilahti, H. (2018) Mu transpososome activity-profiling yields hyperactive MuA variants for highly efficient genetic and genome engineering. *Nucleic Acids Res.*, 46, 4649–4661.



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Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Triton is a trademark of The Dow Chemical Company or an affiliated company of Dow.

Patent

v.3 MuA Transposase (in vivo Integrator) is covered by International Patent No. WO 2014/013127 AI

Please contact us for more information

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