

6405 Mira Mesa Blvd Ste 100 San Diego, CA 92121 **Tel:** 1.858.202.1401

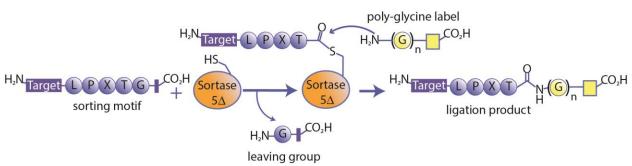
Fax: 1.858.481.8694

Email: support@bpsbioscience.com

<u>Data Sheet</u> Sortase Sampling Kit Catalog #79709

DESCRIPTION:

Sortases catalyze a transpeptidation reaction, where the enzyme cleaves the amide bond between the threonine and glycine of the sortase recognition sequence (LPXTG for S. *aureus* Sortase A), generating a thioacyl intermediate. Subsequently, this intermediate is resolved by the N-terminus of an oligoglycine nucleophile, creating a new peptide bond that links the substrate to the incoming nucleophile. Sortase variants are available that may exhibit enhanced activity with the substrate of interest. This kit provides wildtype Sortase and four different mutants to evaluate which sortase is best for the chosen application.



COMPONENTS:

Catalog #	Component	Amount	Storage
71086	Sortase wildtype enzyme	10 µg	
79393	Sortase 5∆ enzyme	10 µg	-80°C
71047	Sortase 6∆ enzyme	10 µg	Avoid freeze/thaw cycles
71048	Sortase 7∆ enzyme	10 µg	
72518	Sortase 8∆ enzyme	10 µg	
79394	Reaction Buffer	100 µl	4°C

MATERIALS OR INSTRUMENTS REQUIRED BUT NOT SUPPLIED:

Target protein (1 mg/mL, 10 µg per reaction)
Poly-glycine label (5 mM, 1 µl per reaction, <10 kDa)
37°C incubator
Microcentrifuge

Electrophoresis sample buffer (for SDS-PAGE) or 1 M EDTA solution (for mass spectroscopy)

OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



6405 Mira Mesa Blvd Ste 100 San Diego, CA 92121 **Tel:** 1.858.202.1401

Fax: 1.858.481.8694
Email: support@bpsbioscience.com

APPLICATIONS: Great for evaluating substrate specificity or optimizing the sortase ligation reaction.

STABILITY: At least 6 months from date of receipt, when stored as directed.

REFERENCE: Popp M. *Methods Mol Biol.* 2015; **1266:**185-98.

LABELING PROTOCOL:

- 1) Thaw a single vial of Sortase on ice.
- 2) While on ice, set up the labeling reaction as follows (add all reagents to the vial containing Sortase):

Reagent	Volume to add
Target Protein (1 mg/mL)	10 µl
Reaction Buffer	2 µl
Poly-Glycine Label (5 mM)	1 µl
Sortase	10 µl
Total	23 µl

- 3) Mix reaction well by gently pipetting up and down.
- 4) Incubate reaction at 37°C for 30 minutes and mix every 5-10 minutes (or place on shaker if available).
- 5) Stop reaction by adding SDS-PAGE sample buffer, or 2.3 µl of 1 M EDTA (10 mM final).
- 6) Evaluate labeling by SDS-PAGE or mass spectroscopy.

For questions or concerns, please contact BPS Bioscience, Inc. at info@bpsbioscience.com

BPS is a leader in the custom expression of recombinant proteins. Contact us about custom projects for the expression of target proteins containing the sortase recognition sequence.

OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



6405 Mira Mesa Blvd Ste 100 San Diego, CA 92121 **Tel:** 1.858.202.1401

Fax: 1.858.481.8694

Email: support@bpsbioscience.com

RELATED PRODUCTS

<u>Product</u>	<u>Cat. #</u>	<u>Size</u>
Sortase wildtype enzyme	71086	50 µg
Sortase 5∆ enzyme	71046	50 µg
Sortase 6∆ enzyme	71047	50 µg
Sortase 7∆ enzyme	71048	50 µg
Sortase 8∆ enzyme	72518	50 µg
SiMPLe Protein Labeling Kit	79392	3 units
(Contage Mediated Duetain Ligation)		

(Sortase Mediated Protein Ligation)