

Bacterial Sortase Substrate II , Dabcyl/Edans Dabcyl - QALPETGEE - Edans

Product Code: 3133-0100

**Innopep
Peptide
Product**

Price: \$224.00

Short Description

Dabcyl-QALPETGEE-Edans

Description

Overview

Description

This peptide is a C-terminal surface sorting signal with a conserved LPXTG motif, labeled with the Dabcyl/Edans FRET pair. Sortase cleaves surface proteins at the LPXTG motif and catalyzes the formation of an amide bond between the carboxyl group of threonine and the amino group of cell-wall crossbridges. Sortases are a family of Gram-positive transpeptidases responsible for anchoring surface protein virulence factors to the peptidoglycan cell wall layer. Surface proteins of *Staphylococcus aureus* are anchored to the bacterial cell wall by a mechanism requiring this C-terminal sorting signal. Cell wall sorting is the covalent attachment of surface proteins to the peptidoglycan via a C-terminal sorting signal that contains a consensus LPXTG sequence. Cleavage of this FRET substrate by sortase reveals the fluorescent signal that may be measured to study sortase activity. Inhibition of the sortase activity is a potential way of treatment of the staphylococcal infection. The LPXTG motif is conserved in more than

	100 surface proteins of Gram-positive pathogens.
Sequence	Dabcyl-QALPETGEE-Edans
Sequence (3 Letter)	Dabcyl - Gln - Ala - Leu - Pro - Glu - Thr - Gly - Glu - Glu - Edans
Molecular Weight	1472.6
Properties	
Purity	% Peak Area By HPLC ? 95%
Storage	-20 °C

References

Ton-That, H. et al. *PNAS* **96**, 12424 (1999); W. W Navarre and O. Schneewind
Mol. Biol. Rev. **63**, 174 (1999); Kang, S. et al. *Biol. Pharm. Bulletin* **29**, 1751
(2006); Ilangovan, U. et al. *PNAS* **98**, 6056 (2001).