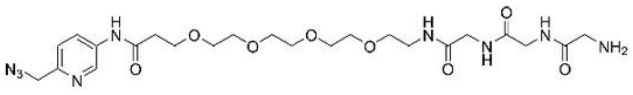
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

PICOLYL AZIDE-GLY-GLY-GLY

SKU: CCT-1553



DESCRIPTION

Picolyl Azide is an advanced probe for sortase mediated labeling of proteins that incorporates a copper-chelating motif to raise the effective concentration of Cu(I) at the reaction site to boost the efficiency of the CuAAC reaction, resulting in a faster and more biocompatible CuAAC labeling. Sortase catalyzes a transpeptidase reaction between a specific internal sequence of a protein and an amine group present on the N-terminus of triglycine recently has become an area of great interest. This method of labeling proteins has been denoted as “Sortagging”.

Proteins conjugated to Picolyl Azide-Gly-Gly-Gly can be further modified with alkyne- or DBCO-containing molecules creating site-specific protein conjugates. Examples of creating protein conjugates using sortagging include site-specifically PEGylating proteins,[1] site-specific protein-lipid conjugates,[2] and constructing peptides and glycosylphosphatidylinositol chimeras.[3] Sortase has also been used in peptide synthesis to cyclize peptides to create macrocyclic peptides, glycopeptides[4] and protein−protein conjugates.

SPECIFICATIONS

CAS Number	N/A
Molecular Weight	567.6
Appearance	Grey amorphous solid
Chemical Formula	C23H37N9O8
Purity	>95% (HPLC)
Unit Size	10 mg, 25 mg, 100 mg

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

Solubility	DMSO, DMF
Storage Instructions	-20°C. Desiccate
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

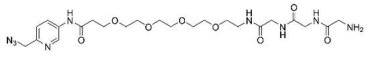
SELECTED REFERENCES

1. Dougan, S. K., *et al.* (2011). Sortase-catalyzed transformations that improve the properties of cytokines. *Proc Natl Acad Sci U S A,* **108 (8)**, 3169-74. [PubMed]
2. Miller, G. M., *et al.* (2008). Lipid modification of proteins through sortase-catalyzed transpeptidation. *J Am Chem Soc.,* **130 (48)**, 16338-43. [PubMed]
3. Swarts, B. M., *et al.* (2009). Sortase-catalyzed peptide-glycosylphosphatidylinositol analogue ligation. *J Am Chem Soc.,* **131 (29)**, 9878-9. [PubMed]
4. Wu, Z., *et al.* (2011). Sortase A-catalyzed peptide cyclization for the synthesis of macrocyclic peptides and glycopeptides . *Chem Commun (Camb).,* **47 (32)**, 9218-20. [PubMed]
5. Dougan, S. K., *et al.* (2012). Preparation of unnatural N-to-N and C-to-C protein fusions. *Proc Natl Acad Sci U S A,* **109 (30)**, 11993-8. [PubMed]

DOCUMENTS

- Safety Data Sheet
- Download CoA
- Datasheet

GALLERY IMAGES



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