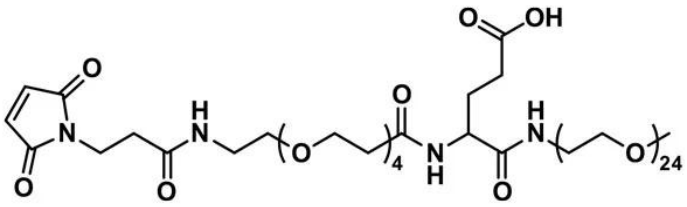
www.vectorlabs.com
Email: customerservice@vectorlabs.com
Telephone: (650) 697-3600

MAL-DPEG®4-GLU(OH)-NH-M-DPEG®24

SKU: QBD-11580



DESCRIPTION

MAL-dPEG®4-Glu(OH)-NH-m-dPEG®24, product number QBD-11580, is one of Vector Laboratories' unique, patented class of modular, designable payload delivery reagents called Sidewinder™. Sidewinder™ products are built on a discrete PEG (dPEG®) backbone for use in antibody-drug conjugates (ADCs) and related constructs. The payload (cytotoxin, dye, small molecule) loads onto the chain's sidearm. The distal end's methoxy-terminated dPEG®24 spacer protects payloads and modifies performance.

The maleimide reactive group of MAL-dPEG®4-Glu(OH)-NH-m-dPEG®24, product number QBD-11580, reacts with free thiols on the biomolecule through the thiol-maleimide reaction (a Michael addition reaction) to form a stable thioether bond. The sidearm is an amine-reactive carboxylic acid. It can be reacted directly with free amines to form stable amide bonds using a carbodiimide like EDC. Alternatively, the carboxylic acid can be functionalized as the active ester with N-hydroxysuccinimide (NHS ester) or 2,3,5,6-tetrafluorophenol (TFP ester) and then reacted with free amines.

Sidewinder™ products are designed to facilitate the creation of stable, high-DAR ADCs. Published research has shown that putting a hydrophobic payload (e.g., a cytotoxin) close to the antibody surface and protecting it with a SuperHydrophilic™ dPEG® construct is better by many measures of efficacy than putting the payload at the distal end of the linker. This molecule can also modify and optimize BD, cell trafficking and internalization, serum half-life, and immunogenicity.

The dPEG® linkers and spacers in the Sidewinder™ construct are uniform, single molecular-

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

weight PEGs with discrete chain lengths. In contrast, traditional, non-uniform polymer PEG linkers and spacers have a dispersed range of PEG chain lengths, each with a unique molecular weight. Unlike dispersed polymer PEGs, dPEG® products are high-purity compounds with reproducible purity profiles.

Sidewinder™ molecules are also fully designable. MAL-dPEG®4-Glu(OH)-NH-m-dPEG®24 can be modified to change the spacer lengths, add more sidearm attachment points, add different sidearm attachment points to carry payloads with other reactivities, change the maleimide attachment group to another reactive group, and many more customizations. Please inquire about your specific needs.

SPECIFICATIONS

CAS Number	N/A
Molecular Weight	1615.84; single compound
Chemical Formula	$C_{72}H_{134}N_4O_{35}$
Purity	> 95%
Unit Size	50 mg, 250 mg
Solubility	Methylene Chloride, Methanol or Acetonitrile.
Spacers	dPEG® Spacer is 99 atoms and 104.6 Å
Storage Instructions	-20°C; Always let come to room temperature before opening; be careful to limit exposure to moisture and restore under an inert atmosphere; stock solutions can be prepared with dry solvent and kept for several days (freeze when not in use). dPEG® pegylation compounds are generally hygroscopic and should be treated as such. This will be less noticeable with liquids, but the solids will become tacky and difficult to manipulate, if care is not taken to minimize air exposure.
Shipping Instructions	Ambient

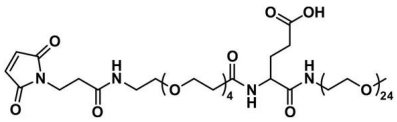
DOCUMENTS

- Safety Data Sheet
- Datasheet

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

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

GALLERY IMAGES



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