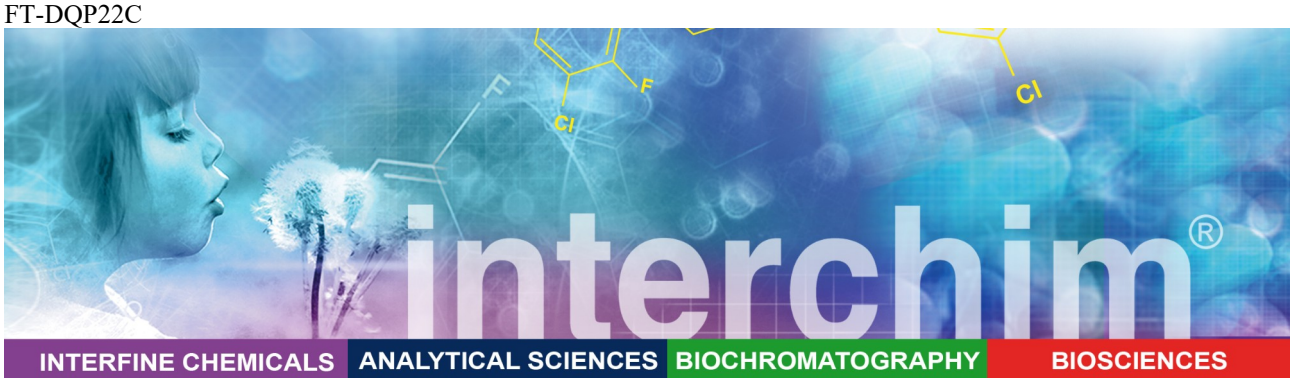
FT-DQP22C



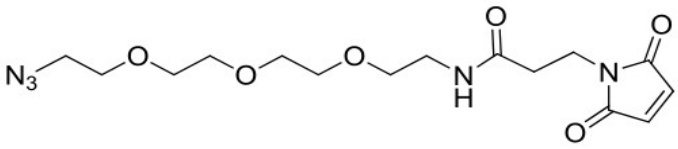
Azido-PEG3-Maleimide Kit

Product Description

Azido-PEG3-Maleimide Kit

DQP22C, 25mg
DQP22D, 100mg
DQP22E, 1g

Chemical Composition : $C_{15}H_{23}N_5O_6$
MW: 369.37
Vial 1 Off-white to grey solid
Vial 2 Slightly yellow oil
Storage : Upon receipt store at -20°C (1 year)



Preparation of Azido-PEG3-Maleimide Stock Solution

1. Add dry water-miscible organic solvent such as dimethyl sulfoxide (DMSO) or dimethyl formamide (DMF) to Azido-PEG3-amine (vial #2) and shake for ca. 30 seconds.

Kit size	Solvent amount
25 mg	1 mL
100 mg	2.5 mL
1000 mg	25 mL

2. While keeping the Maleimide-NHS ester (vial #1, white solid) under a dry atmosphere (e.g. with nitrogen) slowly add a solution of Azido-PEG3-Amine (vial #2) with stirring or shaking, and then stir or shake for 30 minutes at room temperature. The progress of the reaction can be followed TLC.

3. Stock solution of Azido-PEG3-Maleimide is ready to use. At this stage the product is stable if stored at -20°C or lower for short periods of time (hours).

4. The concentration of azide-PEG4-maleimide stock solution is:

Kit size	Conc. of Azido-PEG3- Maleimide	Amount of Azido-PEG3- Maleimide
25 mg	75 mM	0.075 mmol
100 mg	120 mM	0.3 mmol
1000 mg	120 mM	3 mmol

5. TLC data: The solvent is typically something like methanol: methylene chloride 1:20 or 4 ml: 10 drops, run on a silica gel normal phase plate and developed with a potassium permanganate spray. E.g. the Rf of the Azido-PEG3-Maleimide is slightly lower one of the Maleimide-NHS ester. And when the reaction is complete, it will be one clean spot on the plate.

Procedure for Labeling Proteins

1. If required, buffer exchange the protein sample into phosphate reaction buffer at 1-5 mg/mL using a spin desalting column.

2. Add stock solution of TCEP to the protein solution at final concentration of 20 mM, pipette up and down several times to mix.

3. Incubate the reaction to for 30 minutes.

4. Buffer exchange TCEP reduced protein into reaction buffer. If a reaction buffer does not contain EDTA, add immediately stock solution of EDTA to a solution of reduced protein at final concentration of 5-10 mM.

5. Add a 20-fold molar excess of **freshly prepared** maleimide reagent to the protein sample.

6. Incubate reaction mixture for 1-4 hour at room temperature or for 2-8 hours at 4°C.

Note: Many proteins will precipitate when the DMF or DMSO concentration exceeds 10% of the final reaction volume; if protein solubility is not an issue, there is no limit to the DMF or DMSO concentration that may be used.

7. Remove the excess reagent by desalting the labeled protein through a spin desalting column or by dialysis.

For use *in vitro* only, not for diagnostic.

Ordering and other information

For any information, please contact Uptima, or your local distributor.

LIFE SCIENCES interchim®
211bis Avenue J.F. Kennedy - BP 1140 - 03103 Montluçon Cedex - France
S.A. a conseil de surveillance 1.548.000 euro - RCS Montluçon 917 050 171 -APE 4669B