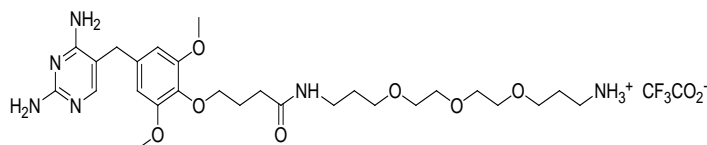


PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: TMP-PEG3-amine, TFA salt**CATALOG #** 91056**MOLECULAR INFORMATION:** C₂₉H₄₅F₃N₆O₉
MWt: 678.71**PROPERTIES:****Color & Form**

White solid

Solubility

Soluble in DMF or DMSO

STORAGE AND HANDLING:

Store at -20°C

APPLICATION:

The trimethoprim-PEG3-amine (TMP-PEG3-amine) can be conjugated to various probes to make trimethoprim-based chemical tag (TMP-tag). The TMP-tag is based on the high affinity ($K_D \sim 1\text{nM}$) binding of TMP to the *E.coli* dihydrofolate reductase (eDHFR). The target protein, fused to eDHFR via standard molecular cloning technology, is labeled by the TMP-probe in a non-covalent manner. The low affinity of TMP with mammalian DHFR ($K_D > 1\mu\text{M}$) ensures minimal background. The TMP-tag has been demonstrated to enable protein visualization and manipulation both inside and on surface of mammalian cells.[1-4]

Ref.: 1) *Nat. Methods* **2**, 255(2005); 2) *ChemBioChem* **8**, 767(2007); 3) *Nat. Methods* **7**, 717(2010); 4) *J Am Chem Soc.* **133**, 10006(2011)

TOXICITY:

Not established. Not listed by NTP, IARC or OSHA.

FIRST AID:

Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

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