Product Information

Trimethoprim-PEG-amine (trifluoroacetate salt)
Item No. 9002107

Formal Name: N-(2-(2-(2-(2-aminoethoxy)ethoxy)ethy)-2-(4-((2,6-diaminopyrimidin-4-yl)methyl)-2,6-dimethoxyphenox)-acetamide tris(2,2,2-trifluoroacetate)

MF: C_{20}H_{36}N_{6}O_{6}·3CF_{3}COOH
FW: 850.6
Purity: ≥98%

Stability: ≥2 years at -20°C

For long term storage, we suggest that trimethoprim-PEG-amine (trifluoroacetate salt) be stored as supplied at -20°C. It should be stable for at least two years.

Trimethoprim-PEG-amine (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the trimethoprim-PEG-amine (trifluoroacetate salt) in the solvent of choice. Trimethoprim-PEG-amine (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of trimethoprim-PEG-amine (trifluoroacetate salt) in these solvents is approximately 10, 15, and 20 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of trimethoprim-PEG-amine (trifluoroacetate salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of trimethoprim-PEG-amine (trifluoroacetate salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Trimethoprim (Item No. 16473) is an antibiotic that inhibits dihydrofolate reductase (DHFR) and shows selectivity for bacterial DHFR over mammalian DHFR (IC_{50} = 5 and 30,000 nM, respectively). Commonly used in combination with sulfamethoxazole to minimize acquired resistance, trimethoprim has long been used against urinary tract infections. Trimethoprim-PEG-amine is a conjugated form of trimethoprim linked with polyethylene glycol (PEG) amine. The addition of PEG to drugs can provide greater solubility, longer duration of exposure, and the potential to overcome resistance associated with the drug.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/9002107

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Safety Data
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to your institution.

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