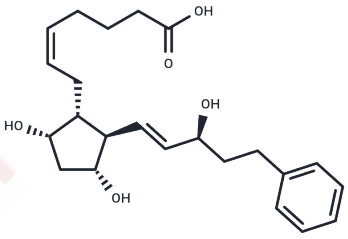
Data Sheet (Cat.No.T20939)

TargetMol

Bimatoprost acid

Chemical Properties



CAS No. : 38344-08-0

Formula: C23H32O5

Molecular Weight: 388.5

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Bimatoprost acid (17-phenyl trinor PGF2α) is a metabolically stable analog of PGF2α and has a potential antagonistic activity for the FP receptor. It has a relative potency of 756% compared to PGF2α for binding to the FP receptor on ovine luteal cells.
Targets(IC50)	GPCR,Prostaglandin Receptor

Solubility Information

Solubility	DMSO: 122.5 mg/mL (315.32 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (25.74 mM),Suspension. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.574 mL	12.870 mL	25.740 mL
5 mM	0.5148 mL	2.574 mL	5.148 mL
10 mM	0.2574 mL	1.287 mL	2.574 mL
50 mM	0.0515 mL	0.2574 mL	0.5148 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

1.Yulia K , Kinuthia M W , Thoa T , et al. New Human Organotypic Corneal Tissue Model for Ophthalmic Drug Delivery Studies[J]. Investigative Ophthalmology & Visual Science, 2018, 59(7):2880-2898.
Klimko PG, Sharif NA. Discovery, characterization and clinical utility of prostaglandin agonists for the treatment of glaucoma. Br J Pharmacol. 2018 Apr 17. doi: 10.1111/bph.14327. [Epub ahead of print] Review. PubMed PMID: 29665040.
Shen J, Goodkin ML, Tong W, Attar M. Ocular pharmacokinetics and tolerability of bimatoprost ophthalmic solutions administered once or twice daily in rabbits, and clinical dosing implications. Clin Ophthalmol. 2017 Sep 28;11:1761-1767. doi: 10.2147/OPTH.S143428. eCollection 2017. Erratum in: Clin Ophthalmol. 2018 Aug 17;12: 147PubMed PMID: 29026287; PubMed Central PMCID: PMC5627754.
Krupa M, Chodyński M, Ostaszewska A, Cmoch P, Dams I. A Novel Convergent Synthesis of the Potent Antiglaucoma Agent Tafluprost. Molecules. 2017 Jan 31;22(2). pii: E217. doi: 10.3390/molecules22020217. PubMed PMID: 28146132.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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