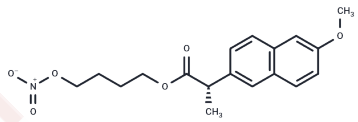
Data Sheet (Cat.No.T33595)

TargetMol

Naproxcinod

Chemical Properties



CAS No. : 163133-43-5

Formula: C18H21NO6

Molecular Weight: 347.36

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

Biological Description

Description	Naproxcinod is a derivative of naproxen exhibiting analgesic and anti-inflammatory activity. As a cyclooxygenase (COX)-inhibitory nitric oxide donor (CINOD), it is indicated for osteoarthritis and inflammatory conditions.
Targets(IC50)	NO Synthase,COX,Immunology/Inflammation related
In vitro	Naproxcinod (1-30 μM, 15 minutes) increased cGMP levels in a concentration-dependent manner, reaching up to 27 times the baseline level [1]. Naproxcinod (1-100 μM, 8 hours) enhanced HO-1 mRNA expression in endothelial cells in a concentration-dependent manner [2].
In vivo	Naproxcinod (0, 10, 21, and 41 mg/kg, orally administered once daily for 42 weeks) significantly increased average body weight (+7.3%) compared to the solvent control group and improved skeletal and cardiac disease phenotypes in DMD mice [3].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8789 mL	14.3943 mL	28.7886 mL
5 mM	0.5758 mL	2.8789 mL	5.7577 mL
10 mM	0.2879 mL	1.4394 mL	2.8789 mL
50 mM	0.0576 mL	0.2879 mL	0.5758 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

Berndt G, et al. A common pathway of nitric oxide release from AZD3582 and glyceryl trinitrate. Eur J Pharm Sci. 2004 Feb;21(2-3):331-5.
Berndt G, et al. AZD3582 increases heme oxygenase-1 expression and antioxidant activity in vascular endothelial and gastric mucosal cells. Eur J Pharm Sci. 2005 Jun;25(2-3):229-35.
Uaesoontrachoon K, et al. Long-term treatment with naproxcinod significantly improves skeletal and cardiac disease phenotype in the mdx mouse model of dystrophy. Hum Mol Genet. 2014 Jun 15;23(12):3239-49.
Miglietta D, et al. Naproxcinod shows significant advantages over naproxen in the mdx model of Duchenne Muscular Dystrophy. Orphanet J Rare Dis. 2015 Aug 22;10:101.