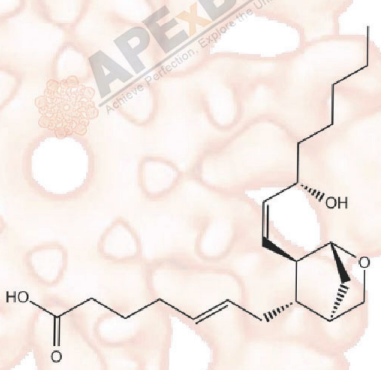
Product Data Sheet

U 46619

Cat. No.:	B6890
CAS No.:	56985-40-1
Formula:	C21H34O4
M.Wt:	350.5
Synonyms:	
Target:	GPCR/G protein
Pathway:	Prostanoid Receptors
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

≥100 mg/mL in DMSO, ≥100 mg/mL in Ethanol, ≥100 mg/mL in DMF, ≥2 mg/mL in PBS pH 7.2

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	2.8531 mL	14.2653 mL	28.5307 mL
5 mM	0.5706 mL	2.8531 mL	5.7061 mL
10 mM	0.2853 mL	1.4265 mL	2.8531 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	selective agonist of prostaglandin H2 (PGH2)/thromboxane A2 (TxA2) (TP) receptor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Human platelet
Preparation method:	Soluble in methyl acetate (supplied pre-dissolved -10 mg/ml). General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	24 h
Applications:	In human platelet, U 46619 induced serotonin release, platelet aggregation,

		and fibrinogen receptor with the EC50 values of 0.54 ± 0.13, 1.31 ± 0.34 and 0.53 ± 0.21 μM, respectively.
In Vivo	**Animal experiment**	
	Animal models:	Conscious spontaneously hypertensive rats (SHR)
	Dosage form:	Intracerebroventricular (ICV) administration, 1–100 nmol/kg
	Applications:	In conscious spontaneously hypertensive rats (SHR), U-46619 (1–100 nmol/kg i.c.v.) induced a strong dose-related increase in blood pressure but had no significant effect on heart rate. In conscious noruotensive rats (NR) neither blood pressure nor heart rate was significantly affected. Furthermore, U-46619 (0.1–100 nmol/kg, i.c.v.) had no significant effect on blood pressure, heart rate or ventilation in urethane-anaesthetised NR .
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Yan YY, Ao LY, et al."Therapeutic effects of JLX001 on cerebral ischemia through inhibiting platelet activation and thrombus formation in rats." Biomed Pharmacother. 2018 Jul 7;106:805-812.PMID:29990874
2. Zhang Q, Tan CN, et al. "Adsorbed hollow fiber-based biological fingerprinting for the discovery of platelet aggregation inhibitors from Danshen-Honghua decoction." J Sep Sci. 2018 Mar 23.PMID:29573136
3. Zhang Q, Tan C, et al. "Characterization of active antiplatelet chemical compositions of edible Citrus limon throughultra-performance liquid chromatography single quadrupole mass spectrometry-based chemometrics." Food Funct. 2018 Apr 24.PMID:29687827

See more customer validations on www.apexbt.com.

References

[1]. Morinelli T A, Niewiarowski S, Daniel J L, et al. Receptor-mediated effects of a PGH2 analogue (U 46619) on human platelets[J]. American Journal of Physiology-Heart and Circulatory Physiology, 1987, 253(5): H1035-H1043.
[2]. Siren A L, Svartstrm-Fraser M, Paakkari I. Central cardiovascular effects of the endoperoxide analogue U-46619 in rats[J]. Prostaglandins, Leukotrienes and Medicine, 1985, 17(3): 381-386.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com