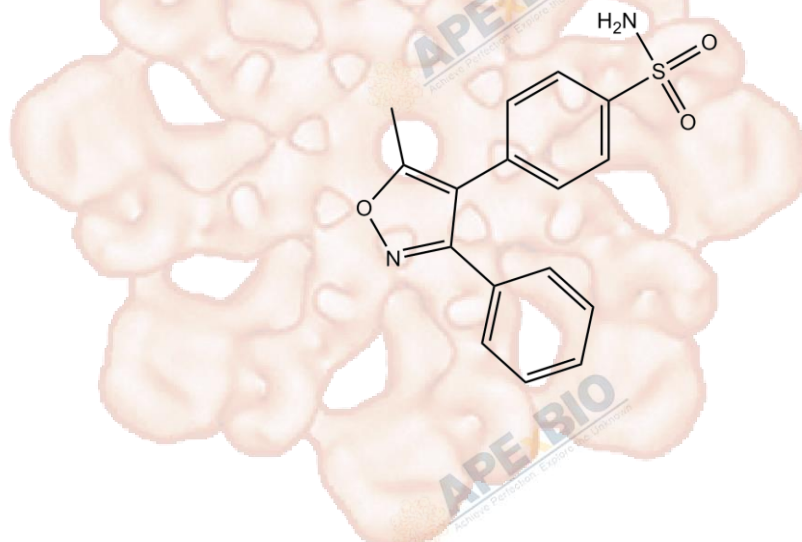


Product Data Sheet

Valdecoxib

Cat. No.:	B1459
CAS No.:	181695-72-7
Formula:	C ₁₆ H ₁₄ N ₂ O ₃ S
M.Wt:	314.36
Synonyms:	
Target:	Neuroscience
Pathway:	COX
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥ 15.72 mg/mL in DMSO; ≥ 5.42 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	3.1811 mL	15.9053 mL	31.8107 mL
	5 mM	0.6362 mL	3.1811 mL	6.3621 mL
	10 mM	0.3181 mL	1.5905 mL	3.1811 mL

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

Biological Activity

Shortsummary

COX-2 inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Preparation method:

The solubility of this compound in DMSO is > 10 mM. 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:

Overnight for assessment of the extent of COX-2 inhibition; 25 mins for assessment of the extent of COX-1 inhibition

	Applications:	In the assay for assessment of the extent of COX-2 inhibition, Valdecoxib inhibited lipopolysaccharide-induced PGE2 production, with an IC50 value of 0.89 μ M. In the assay for assessment of the extent of COX-1 inhibition, Valdecoxib inhibited TXB2 production, with an IC50 value of 25.4 μ M.
In Vivo	Animal experiment	
	Animal models:	Male SD rats
	Dosage form:	0.02, 0.032 or 10.2 mg/kg; p.o.
	Applications:	In SD rats, Valdecoxib inhibited carrageenan-induced foot pad edema, with an ED50 value of 10.2 mg/kg. In a rat adjuvant arthritis model, Valdecoxib also showed chronic anti-inflammatory activity, with an ED50 value of 0.032 mg/kg/day. In addition, Valdecoxib inhibited prostaglandin production at the inflammatory site in a carrageenan-induced air pouch model, with an ED50 value of 0.02 mg/kg.
	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

See more customer validations on www.apexbt.com.

References

[1]. Talley J J, Brown D L, Carter J S, et al. 4-[5-Methyl-3-phenylisoxazol-4-yl]-benzenesulfonamide, valdecoxib: a potent and selective inhibitor of COX-2. Journal of medicinal chemistry, 2000, 43(5): 775-777.

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 APEX BIO 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.

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