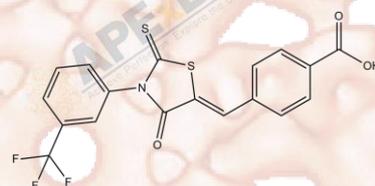


Product Data Sheet

CFTRinh-172

Cat. No.:	B1435
CAS No.:	307510-92-5
Formula:	C ₁₈ H ₁₀ F ₃ NO ₃ S ₂
M.Wt:	409.4
Synonyms:	
Target:	Membrane Transporter/Ion Channel
Pathway:	CFTR
Storage:	Store at -20°C



Solvent & Solubility

≥40.9 mg/mL in DMSO; insoluble in H₂O; insoluble in EtOH

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		2.4426 mL	12.2130 mL	24.4260 mL
	5 mM		0.4885 mL	2.4426 mL	4.8852 mL
	10 mM		0.2443 mL	1.2213 mL	2.4426 mL

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

Biological Activity

Shortsummary

CFTR inhibitor, highly potent and selective

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Fischer rat thyroid cells expressing human wild-type CFTR
Preparation method:	The solubility of this compound in DMSO is >20.5mg/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:	1 mM

	Applications:	CFTRinh-172 inhibited cAMP/flavone-stimulated Cl ⁻ transport in epithelial cells expressing CFTR.
In Vivo	Animal experiment	
	Animal models:	Mice
	Dosage form:	250 µg/kg intraperitoneally
	Applications:	A single administration of CFTRinh-172 prior to cholera toxin infusion effectively prevented fluid accumulation in the toxin-treated intestinal loops.
	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] Ma T, Thiagarajah JR, Yang H, Sonawane ND, Folli C, Galiotta LJ, Verkman AS. Thiazolidinone CFTR inhibitor identified by high-throughput screening blocks cholera toxin-induced intestinal fluid secretion. J Clin Invest. 2002 Dec;110(11):1651-8.

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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