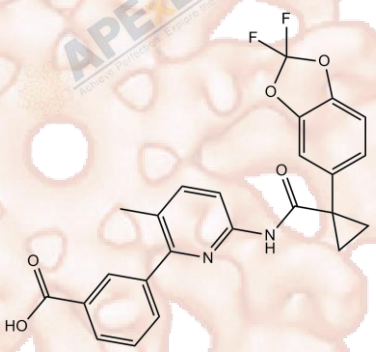
Product Data Sheet

VX-809



Cat. No.:	A8351
CAS No.:	936727-05-8
Formula:	C24H18F2N2O5
M.Wt:	452.41
Synonyms:	VX 809; VX809; Lumacaftor; VRT 826809
Target:	Membrane Transporter/Ion Channel
Pathway:	CFTR
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

⩾22.6 mg/mL in DMSO; insoluble in H2O; ⩾4.91 mg/mL in EtOH with gentle warming

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	2.2104 mL	11.0519 mL	22.1038 mL
5 mM	0.4421 mL	2.2104 mL	4.4208 mL
10 mM	0.2210 mL	1.1052 mL	2.2104 mL

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

Biological Activity

Shortsummary	CFTR corrector
IC_{50} & Target	0.1 μM (CFTR)

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:	Expose time: 48 h.
Applications:	In human bronchial epithelial (HBE) cells, VX-809 could increase

		F508del-CFTR Cl secretion, and increase FEV1 by an average of 3-5% in CF patients with homozygous for the F508del-CFTR mutation in combination with VX-770.
In Vivo	**Animal experiment**	
	Dosage form:	600 mg once daily or 400 mg every 12 hours
	Applications:	At the plasma membrane, it increased F508del-CFTR levels. Alone or in combination with ivacaftor improved clinical outcome in patients with homozygous for the F508del mutation, Lumacaftor acted an key role in the treatment of biochemical abnormalities in CF.
	Preparation method:	orally administered
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. The actual solubility may slightly differ with the theoretical value.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Wainwright CE, Elborn JS, Ramsey BW, et al. Lumacaftor-Ivacaftor in Patients with Cystic Fibrosis Homozygous for Phe508del CFTR. N Engl J Med. 2015 Jul 16;373(3):220-31.

[2] Stanton BA, Coutermarsh B, Barnaby R, et al. Pseudomonas aeruginosa Reduces VX-809 Stimulated F508del-CFTR Chloride Secretion by Airway Epithelial Cells. PLoS One. 2015 May 27;10(5)

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.

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