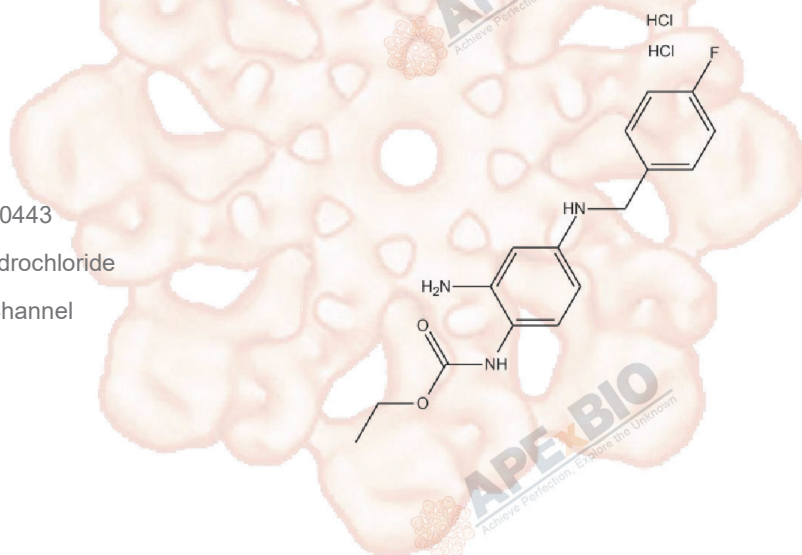


Product Data Sheet

Retigabine dihydrochloride

Cat. No.:	A3758
CAS No.:	150812-13-8
Formula:	C ₁₆ H ₂₀ Cl ₂ FN ₃ O ₂
M.Wt:	376.25
Synonyms:	D 20443 dihydrochloride;D-20443 dihydrochloride;D20443 dihydrochloride
Target:	Membrane Transporter/Ion Channel
Pathway:	GABA Receptor
Storage:	Store at -20°C



Solvent & Solubility

≥18.8 mg/mL in DMSO; ≥52.4 mg/mL in H₂O with gentle warming; ≥8.71 mg/mL in EtOH with gentle warming and ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.6578 mL	13.2890 mL	26.5781 mL
	5 mM	0.5316 mL	2.6578 mL	5.3156 mL
	10 mM	0.2658 mL	1.3289 mL	2.6578 mL

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

Biological Activity

Shortsummary

Antiepileptic compound

 IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line:	Chinese hamster ovary (CHO-K1) cells transfected with the KCNQ2/Q3 tandem construct (CHO-KCNQ2/Q3)
Preparation method:	This compound is soluble in DMSO. 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:	0.1 ~ 10 µM
	Applications:	Retigabine Dihydrochloride (0.1 ~ 10 µM) induced a potassium current and hyperpolarized CHO-KCNQ2/Q3 cells but not in wild-type cells.
In Vivo	Animal experiment	
	Animal models:	Mouse 6-Hz psychomotor seizure models
	Dosage form:	26 or 33 mg/kg; i.p.
	Applications:	In the 6-Hz psychomotor seizure model, Retigabine Dihydrochloride dose-dependently blocked seizures induced by either 32 or 44 mA current stimulation.
	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]. Wickenden AD, Yu W, Zou A, Jegla T, Wagoner PK. Retigabine, a novel anti-convulsant, enhances activation of KCNQ2/Q3 potassium channels. *Mol Pharmacol*. 2000 Sep;58(3):591-600.
- [2]. Large CH, Sokal DM, Nehlig A, Gunthorpe MJ, Sankar R, Crean CS, Vanlandingham KE, White HS. The spectrum of anticonvulsant efficacy of retigabine (ezogabine) in animal models: implications for clinical use. *Epilepsia*. 2012 Mar;53(3):425-36.

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. Short-term 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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