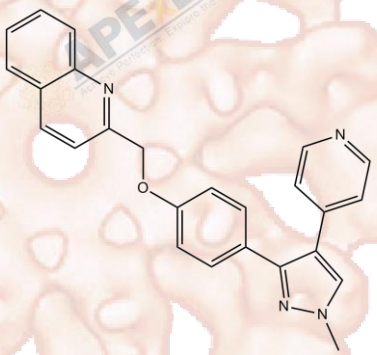
Product Data Sheet

PF-2545920



Cat. No.:	A4325
CAS No.:	1292799-56-4
Formula:	C25H20N4O
M.Wt:	392.45
Synonyms:	
Target:	Metabolism
Pathway:	PDE
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾19.35 mg/mL in DMSO; ⩾99.8 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.5481 mL	12.7405 mL	25.4810 mL
5 mM	0.5096 mL	2.5481 mL	5.0962 mL
10 mM	0.2548 mL	1.2740 mL	2.5481 mL

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

Biological Activity

Shortsummary	PDE10A inhibitor,potent and selective
IC_{50} & Target	0.37 nM (PDE10A)

In Vitro

Cell Viability Assay

Cell Line:	Rat striatal cells
Preparation method：	The solubility of this compound in DMSO is >19.35 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:	1 μM for 30 min at 30°C

	Applications:	Biochemical characterization of PF-2545920 showed that it could modulate both the dopamine D1-direct and D2-indirect striatal pathways and regulate the phosphorylation status of a panel of glutamate receptor subunits in the striatum. It was striking that PDE10A inhibition increased the phosphorylation of the (+/-)-alpha-amino-3-hydroxy-5-methylisoxazole-4-proprionic acid receptor GluR1 subunit at residue serine 845 at the cell surface.
In Vivo	**Animal experiment**	
	Animal models:	Male CF-1 mice or Sprague-Dawley rats
	Dosage form:	1-30 mg/kg, i.p.
	Applications:	PF-2545920 was active in a range of antipsychotic models, antagonizing apomorphine-induced climbing in mice, inhibiting conditioned avoidance responding in both rats and mice, and blocking N-methyl-D-aspartate antagonist-induced deficits in prepulse inhibition of acoustic startle response in rats, while improving baseline sensory gating in mice, all of which strengthen previously reported observations.
	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] Grauer SM, et al. Phosphodiesterase 10A inhibitor activity in preclinical models of the positive, cognitive, and negative symptoms of schizophrenia. J Pharmacol Exp Ther, 2009, 331(2), 574-590.

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