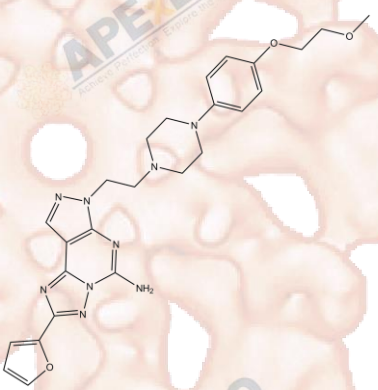
Product Data Sheet

Preladenant



Cat. No.:	A3735
CAS No.:	377727-87-2
Formula:	C25H29N9O3
M.Wt:	503.56
Synonyms:	SCH-420814;SCH 420814;SCH420814
Target:	GPCR/G protein
Pathway:	Adenosine Receptor
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; insoluble in EtOH; ⩾7.3 mg/mL in DMSO

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	1.9859 mL	9.9293 mL	19.8586 mL
5 mM	0.3972 mL	1.9859 mL	3.9717 mL
10 mM	0.1986 mL	0.9929 mL	1.9859 mL

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

Biological Activity

Shortsummary	Adenosine A2A receptor antagonist
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Primary actin-GFP microglia
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:	1 μM, 15 min

	Applications:	Three-dimensional cell reconstructions from primary actin-GFP microglia grown in Matrigel were used to determine cell ramification (expressed as surface area-to-volume ratios) in response to preladenant treatment. Preladenant at concentration of 1 μM prevented the adenosine-induced process retraction in activated microglia.
In Vivo	**Animal experiment**	
	Animal models:	Male CD rats
	Dosage form:	Haloperidol (1 mg/kg s.c.) was administered to induce catalepsy in the rats. Preladenant was administered orally after the 30-min baseline measure, and catalepsy was retested 1 and 4 h after administration.
	Applications:	Preladenant dose-dependently attenuated the cataleptic effects of haloperidol 1h [$F(3,20) = 5.0$, $p < 0.01$] and 4 h [$F(3,20) = 9.8$, $p < 0.01$] after dosing, with statistically significant effects at doses of 0.3 and 1 mg/kg at both time points.
	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] Gyoneva S, Davalos D, Biswas D, et al. Systemic inflammation regulates microglial responses to tissue damage in vivo. Glia, 2014.

[2] Hodgson R A, Bertorelli R, Varty G B, et al. Characterization of the potent and highly selective A2A receptor antagonists preladenant and SCH 412348 [7-[2-[4-2, 4-difluorophenyl]-1-piperazinyl] ethyl]-2-(2-furanyl)-7H-pyrazolo [4, 3-e][1, 2, 4] triazolo [1, 5-c] pyrimidin-5-amine] in rodent models of movement disorders and depression. Journal of Pharmacology and Experimental Therapeutics, 2009, 330(1): 294-303.

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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