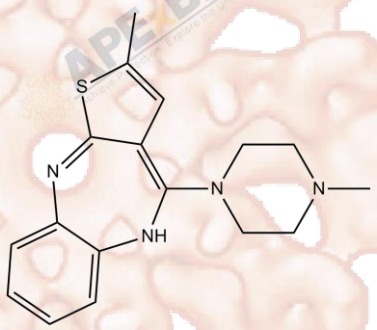
Product Data Sheet

Olanzapine



Cat. No.: B2240

CAS No.: 132539-06-1

Formula: C17H20N4S

M.Wt: 312.43

Synonyms:

Target: Neuroscience

Pathway: 5-HT Receptor

Storage: Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾15.6 mg/mL in DMSO; ⩾2.41 mg/mL in EtOH with gentle warming and ultrasonic

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	3.2007 mL	16.0036 mL	32.0072 mL
5 mM	0.6401 mL	3.2007 mL	6.4014 mL
10 mM	0.3201 mL	1.6004 mL	3.2007 mL

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

Biological Activity

Shortsummary	Antagonist of 5-HT2A and dopamine D2 receptors
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	U87MG and A172 human glioblastoma cell line
Preparation method:	The solubility of this compound in DMSO is >15.6mg/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:	IC50: 20–50 μM, 24 h

	Applications:	Treatment with olanzapine inhibited the proliferation of established glioblastoma cell lines and enhanced the antiproliferative effect of temozolomide on U87MG and A172 cells. Olanzapine (20 μM, 40 μM) inhibited anchorage-independent growth of U87MG cells. Treatment with olanzapine (50 μM, 100 μM) inhibited the migration of A172MG cells. Olanzapine (144 h) exerted proapoptotic and necrotizing effects on glioblastoma cell lines. Olanzapine yielded a significant cytostatic effect on A172 glioblastoma cells.
In Vivo	**Animal experiment**	
	Animal models:	Rats
	Dosage form:	Subcutaneous injection; 0.5 mg/kg, 3 mg/kg and 10 mg/kg
	Applications:	Olanzapine at 0.5 mg/kg, 3 mg/kg and 10 mg/kg (s.c.) dose-dependently increases the extracellular dopamine (DA) and norepinephrine (NE) levels in rat prefrontal cortex, nucleus accumbens and striatum. Olanzapine also increases extracellular levels of a DA metabolite, DOPAC, and tissue concentrations of a released DA metabolite, 3-methoxytyramine.
	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]. Karpel-Massler G, Kast R E, Westhoff M A, et al. Olanzapine inhibits proliferation, migration and anchorage-independent growth in human glioblastoma cell lines and enhances temozolomide's antiproliferative effect[J]. Journal of neuro-oncology, 2015, 122(1): 21-33.

[2]. Li X M, Perry K W, Wong D T, et al. Olanzapine increases in vivo dopamine and norepinephrine release in rat prefrontal cortex, nucleus accumbens and striatum[J]. Psychopharmacology, 1998, 136(2): 153-161.

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