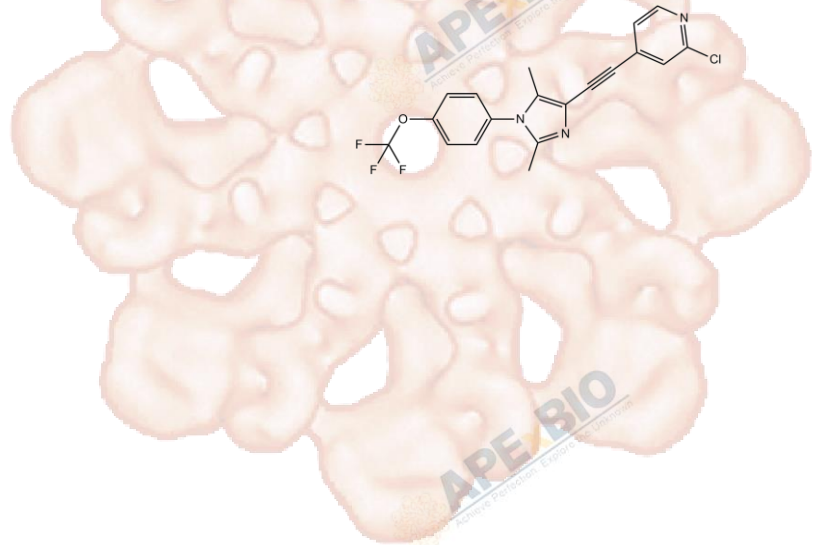


Product Data Sheet

CTEP (RO4956371)

Cat. No.:	B1633
CAS No.:	871362-31-1
Formula:	C19H13ClF3N3O
M.Wt:	391.77
Synonyms:	
Target:	GPCR/G protein
Pathway:	mGluR
Storage:	Store at -20°C



Solvent & Solubility

insoluble in EtOH; insoluble in H₂O; ≥19.6 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.5525 mL	12.7626 mL	25.5252 mL
	5 mM	0.5105 mL	2.5525 mL	5.1050 mL
	10 mM	0.2553 mL	1.2763 mL	2.5525 mL

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

Biological Activity

Shortsummary

MGLu5 inhibitor

IC₅₀ & Target

2.2 nM (mGlu5 receptor)

In Vitro

Cell Viability Assay

Preparation method:

In Vivo

Animal experiment

Animal models:

Adult male C57BL/6 mice model; Adult male Sprague-Dawley rats model;
Fmr1 knockout mouse model

Dosage form:

0.01 to 3.0 mg/kg; oral gavage; for 18 hours; or 2 mg/kg per 48 hr p.o. for 2

	weeks
Applications:	CTEP (0.1 and 0.3 mg/kg) was dose-dependently active in the stress-induced hyperthermia procedure in mice and the Vogel conflict drinking test in rats [1]. Moreover, CTEP corrected excessive protein synthesis, mGlu-long-term depression, and audiogenic seizures in the Hippocampus of Fmr1 knockout mice [2].
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

1. Sun Y, Lipton JO, et al. "Direct current stimulation induces mGluR5-dependent neocortical plasticity." Ann Neurol. 2016 Aug;80(2):233-46.PMID:27315032

See more customer validations on www.apexbt.com.

References

1. Lindemann, L., Jaeschke, G., Michalon, A., Vieira, E., Honer, M., Spooren, W., Porter, R., Hartung, T., Kolczewski, S., Buttelmann, B., Flament, C., Diener, C., Fischer, C., Gatti, S., Prinssen, E. P., Parrott, N., Hoffmann, G. and Wettstein, J. G. (2011) CTEP: a novel, potent, long-acting, and orally bioavailable metabotropic glutamate receptor 5 inhibitor. J Pharmacol Exp Ther. 339, 474-486
2. Michalon, A., Sidorov, M., Ballard, T. M., Ozmen, L., Spooren, W., Wettstein, J. G., Jaeschke, G., Bear, M. F. and Lindemann, L. (2012) Chronic pharmacological mGlu5 inhibition corrects fragile X in adult mice. Neuron. 74, 49-56

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 APEX BIO 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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