

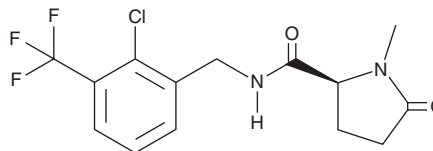
PRODUCT INFORMATION



GSK1482160

Item No. 41980

CAS Registry No.: 1001389-72-5
Formal Name: (2S)-N-[[2-chloro-3-(trifluoromethyl)phenyl]methyl]-1-methyl-5-oxo-2-pyrrolidinecarboxamide
MF: $C_{14}H_{14}ClF_3N_2O_2$
FW: 334.7
Purity: $\geq 95\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

GSK1482160 is supplied as a solid. A stock solution may be made by dissolving the GSK1482160 in the solvent of choice, which should be purged with an inert gas. GSK1482160 is sparingly soluble (1-10 mg/ml) in DMSO and ethanol.

Description

GSK1482160 is an antagonist of the purinergic P2X₇ receptor ($IC_{50} = 3.2$ nM for the human receptor).¹ It inhibits increases in the levels of reactive oxygen species (ROS) induced by LPS and BzATP (Item No. 15577) in THP-1 macrophages when used at a concentration of 1 μM .² GSK1482160 (20 mg/kg twice per day) decreases the accumulation of misfolded tau aggregates in the brain and improves learning and memory in the Y-maze and contextual fear conditioning tests in human P301S tau transgenic mice.³ It reverses mechanical allodynia in a rat model of chronic constriction injury-induced allodynia when administered at a dose of 20 mg/kg.¹

References

1. Abdi, M.H., Beswick, P.J., Billinton, A., *et al.* Discovery and structure-activity relationships of a series of pyroglutamic acid amide antagonists of the P2X₇ receptor. *Bioorg. Med. Chem. Lett.* **20(17)**, 5080-5084 (2010).
2. Homerin, G., Jawhara, S., Dezitter, X., *et al.* Pyroglutamide-based P2X₇ receptor antagonists targeting inflammatory bowel disease. *J. Med. Chem.* **63(5)**, 2074-2094 (2020).
3. Ruan, Z., Delpech, J.-C., Venkatesan Kalavai, S., *et al.* P2RX7 inhibitor suppresses exosome secretion and disease phenotype in P301S tau transgenic mice. *Mol. Neurodegener.* **15(1)**, 47 (2020).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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