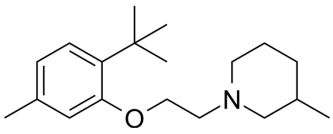
SORT-PGRN interaction inhibitor 2

Cat. No.:	HY-153687
CAS No.:	1008233-79-1
Molecular Formula:	$C_{19}H_{31}NO$
Molecular Weight:	289.46
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

SORT-PGRN interaction inhibitor 2 is a SORT-PGRN inhibitor that can decreases SORT1 protein expression and increases extracellular PGRN secretion in mammalian cell lines. SORT-PGRN interaction inhibitor 2 can be used for neurological disease research[1].

In Vitro

SORT-PGRN interaction inhibitor 2 (Compound MPEP) (0-20 μM; 24 hours) decreases SORT1 expression and increases extracellular PGRN secretion in mammalian cell lines[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	M17 cells, lymphoblastoid cell lines (LCLs) and iPSCs neurons, LCLs from two FTD-GRN families(UBC17 and UBC15)
Concentration:	0, 5, 10, 20 μM
Incubation Time:	24 h
Result:	Preferentially increased extracellular PGRN levels by suppressing or reducing intracellular SORT1 levels without affecting sortilin-related family members SORLA and SORCS1. Made exPGRN levels in the heterozygous mutation carrier (GRN+/2-LCL) restored to a level comparable with the homozygous non-carrier (GRN+/+-LCL) in p.R418X mutation in family UBC17. Made exPGRN levels in the UBC15 family restored to 80% of that of noncarrier GRN+/+-LCL levels.

REFERENCES

[1]. Lee WC, et.al. Targeted manipulation of the sortilin-progranulin axis rescues progranulin haploinsufficiency. Hum Mol Genet. 2014 Mar 15;23(6):1467-78.

Caution: Product has not been fully validated for medical applications. For research use only.

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