

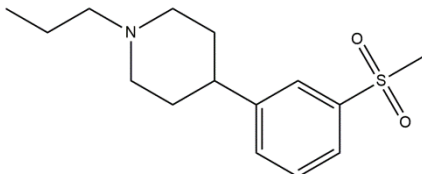
Pridopidine

06/20

ALTERNATE NAMES: 4-[3-(Methylsulfonyl)phenyl]-1-propylpiperidine; 4-(3-Methanesulfonyl-phenyl)-1-propyl-piperidine; ACR16; Huntexil

CATALOG #: B3045-5 5 mg
B3045-25 25 mg

STRUCTURE:



MOLECULAR FORMULA: C₁₅H₂₃NO₂S

MOLECULAR WEIGHT: 281.41

CAS NUMBER: 346688-38-8

APPEARANCE: White Solid

PURITY: ≥97%

SOLUBILITY: Soluble in DMSO

DESCRIPTION: Pridopidine is a phenylpiperidine dopaminergic stabilizer. It is a low affinity dopamine D2 receptor antagonist and a potent sigma-1 receptor (S1R) agonist. The affinity of pridopidine for S1R is 100-fold higher than the affinity for D2 Receptor (high-affinity K_i of 70 nM at S1R and 7520 nM at D2 receptor). It improves motor function and shows neuroprotective effects in a mouse model of Huntington Disease. Due to interaction of the SARS-CoV-2 proteins Nsp6 and Orf9c with sigma receptors, modulators of sigma receptors are being investigated for the treatment of SARS-Cov-2.

STORAGE TEMPERATURE: -20°C. Protect from air. Store under desiccating conditions

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Sahlholm, K., Sijbesma, J.W.A., Maas, B., et al. Pridopidine selectively occupies sigma-1 rather than dopamine D2 receptors at behaviorally active doses. *Psychopharmacology* 232:3443–3453 (2015).
2. Geva, M., Kusko, R., Soares, H., et al. Pridopidine activates neuroprotective pathways impaired in Huntington Disease. *Human Molecular Genetics*, 25: 18 3975–3987 (2016).
3. Squitieri, F., Pardo, A.D., Favellato, M., et al. Pridopidine, a dopamine stabilizer, improves motor performance and shows neuroprotective effects in Huntington disease R6/2 mouse model. *J. Cell. Mol. Med.* 19: 11, 2540-2548 (2015).
4. Ryskamp, D.A., Korban, S., Zhemkov, V. et al. Neuronal Sigma-1 Receptors: Signaling Functions and Protective Roles in Neurodegenerative Diseases. *Front. Neurosci.* 13:862 (2019).

RELATED PRODUCTS:

Lasmiditan hemisuccinate (Cat. No. B3032)
 AMG-517 (Cat. No. B3019)
 Olanzapine (Cat. No. B2677)
 Valbenazine (Cat. No. B2954)
 Remdesivir (Cat. No. B2997)

DISCLAIMER: *FOR RESEARCH USE ONLY! Not to be used on humans.*