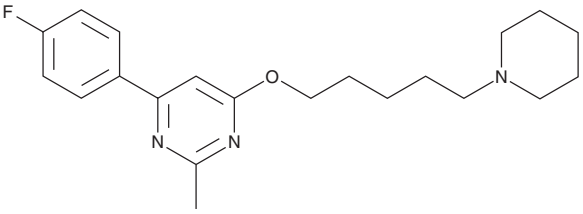
PRODUCT INFORMATION

Enecadin

Item No. 45478

CAS Registry No.: 259525-01-4
Formal Name: 4-(4-fluorophenyl)-2-methyl-6-[[5-(1-piperidinyl)pentyl]oxy]-pyrimidine
Synonym: NS-7
MF: $C_{21}H_{28}FN_3O$
FW: 357.5
Purity: ≥98%
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

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

Description

Enecadin is an inhibitor of voltage-gated sodium channels (Na_vs) and high-voltage activated calcium channels.[1] It selectively inhibits Na_vs and L-, N-, and T-type calcium channels over voltage-gated potassium channels in NG 108-15 cells (IC_{50}s = 7.8, 4.5, 7.3, 17.2, and 160.5 µM, respectively). *In vivo*, enecadin (0.125-0.5 mg/kg, i.v.) reduces infarct volume and improves motor incoordination in a rat model of stroke induced by permanent middle cerebral artery occlusion (MCAO).[2] It also reduces neuronal necrosis in a rabbit model of spinal cord ischemia when administered at a dose of 1 mg/kg.[3]

References

1. Suma, C., Hayashi, S., Ukai, Y., *et al.* Na^+ and high-voltage-activated Ca^{2+} channel blocking actions of NS-7, a novel neuroprotective agent, in NG108-15 cells. *Eur. J. Pharmacol.* **336(2-3),** 283-290 (1997).
2. Tamura, M., Aoki, Y., Seto, T., *et al.* Cerebroprotective action of a Na^+/Ca^{2+} channel blocker NS-7. II. Effect on the cerebral infarction, behavioral and cognitive impairments at the chronic stage of permanent middle cerebral artery occlusion in rats. *Brain Res.* **890(1),** 170-176 (2001).
3. Shi, E., Kazui, T., Jiang, X., *et al.* NS-7, a novel Na^+/Ca^{2+} channel blocker, prevents neurologic injury after spinal cord ischemia in rabbits. *J. Thorac. Cardiovasc. Surg.* **129(2),** 364-371 (2005).

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.

WARRANTY AND LIMITATION OF REMEDY
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