

PRODUCT INFORMATION



L-838,417

Item No. 22007

CAS Registry No.: 286456-42-6
Formal Name: 3-(2,5-difluorophenyl)-7-(1,1-dimethylethyl)-6-[(1-methyl-1H-1,2,4-triazol-5-yl)methoxy]-1,2,4-triazolo[4,3-b]pyridazine

MF: C₁₉H₁₉F₂N₇O

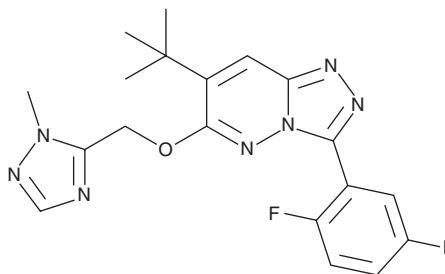
FW: 399.4

Purity: ≥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

L-838,417 is supplied as a solid. A stock solution may be made by dissolving the L-838,417 in the solvent of choice, which should be purged with an inert gas. L-838,417 is soluble in methanol and DMSO.

Description

L-838,417 is a partial agonist of α_2 -, α_3 -, and α_5 subunit-containing GABA_A receptors.¹ It potentiates GABA-induced currents in LTK- cells expressing $\alpha_2\beta_3\gamma_2$, $\alpha_3\beta_3\gamma_2$, or $\alpha_5\beta_3\gamma_2$ subunit-containing GABA_A receptors when used at a concentration of 100 nM. *In vivo*, L-838,417 (10 mg/kg) increases the mechanical paw withdrawal threshold in a rat model of spinal nerve ligation-induced static allodynia.² It also decreases social avoidance in a novel environment in adult and adolescent rats, indicating anxiolytic-like activity, when administered at doses of 1 and 2 mg/kg, respectively.³

References

1. McKernan, R.M., Rosahl, T.W., Reynolds, D.S., *et al.* Sedative but not anxiolytic properties of benzodiazepines are mediated by the GABA_A receptor α_1 subtype. *Nat. Neurosci.* **3(6)**, 587-592 (2000).
2. Nickolls, S., Mace, H., Fish, R., *et al.* A comparison of the $\alpha_2/3/5$ selective positive allosteric modulators L-838,417 and TPA023 in preclinical models of inflammatory and neuropathic pain. *Adv. Pharmacol. Sci.* 608912 (2011).
3. Morales, M., Varlinskaya, E.I., and Spear, L.P. Anxiolytic effects of the GABA_A receptor partial agonist, L-838,417: Impact of age, test context familiarity, and stress. *Pharmacol. Biochem. Behav.* **109**, 31-37 (2013).

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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