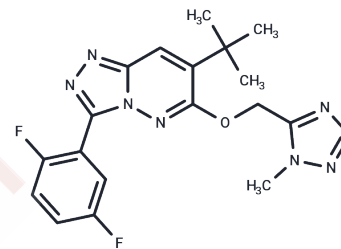


L-838417

## Chemical Properties

CAS No. : 286456-42-6  
 Formula: C<sub>19</sub>H<sub>19</sub>F<sub>2</sub>N<sub>7</sub>O  
 Molecular Weight: 399.4  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
*Actual storage temperature shall be subject to the COA.*



## Biological Description

Description	L-838417 is a GABAA receptor subtype-selective benzodiazepine site-selective ligand and GABAA receptor-positive modulator. L-838417 is a selective partial agonist of the $\alpha$ 2, $\alpha$ 3, and $\alpha$ 5 subtypes and an antagonist of the $\alpha$ 1 subtype and is used in the study of anxiety disorders.
Targets(IC50)	GABA Receptor
In vivo	In unfamiliar environments, adult rats: at a dose of 1.0 mg/kg L-838417, social avoidance shifted to social preference and increased social probing. Adolescent rats: at 2.0 mg/kg L-838417 dose, elimination of social avoidance but no increase in social probing. [2] In familiar environments (after repeated restraint stress), reversal of stress-induced anxiety effects, regardless of age, at 0.5 mg/kg L-838417 dose. $\geq$ 1.0 mg/kg L-838417 dose, reduced social probing, possibly related to inhibition of motor function. [2]

## Solubility Information

Solubility	DMSO: 20 mg/mL (50.08 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (5.01 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.5038 mL	12.5188 mL	25.0376 mL
5 mM	0.5008 mL	2.5038 mL	5.0075 mL
10 mM	0.2504 mL	1.2519 mL	2.5038 mL
50 mM	0.0501 mL	0.2504 mL	0.5008 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

McCabe C, et al. Subtype-selective GABAergic drugs facilitate extinction of mouse operant behaviour. *Neuropharmacology*. 2004 Feb;46(2):171-8.

Morales M, et al. Anxiolytic effects of the GABA(A) receptor partial agonist, L-838,417: impact of age, test context familiarity, and stress. *Pharmacol Biochem Behav*. 2013 Aug;109:31-7.

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