

LY2940094

## Chemical Properties

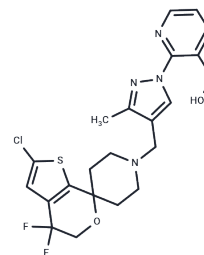
CAS No. : 1307245-86-8

Formula: C<sub>22</sub>H<sub>23</sub>ClF<sub>2</sub>N<sub>4</sub>O<sub>2</sub>S

Molecular Weight: 480.96

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	LY2940094 (LY-2940094) decreases ethanol self-administration in animal models. LY2940094 is an effective, selective, and orally available nociceptin receptor antagonist with high affinity ( $K_i=0.105$ nM) and antagonist potency ( $K_b=0.166$ nM).
Targets(IC <sub>50</sub> )	Opioid Receptor
In vivo	In Indiana Alcohol-Preferring (P) and Marchigian Sardinian Alcohol-Preferring (msP) rats, LY-2940094 (3, 10, or 30 mg/kg; 2-3 mL/kg; orally daily; for 4 days) dose-dependently decreases homecage ethanol self-administration, without affecting food/water intake or locomotor activity.

## Solubility Information

Solubility	DMSO: 41.67 mg/mL (86.64 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.16 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	2.0792 mL	10.3959 mL	20.7917 mL
5 mM	0.4158 mL	2.0792 mL	4.1583 mL
10 mM	0.2079 mL	1.0396 mL	2.0792 mL
50 mM	0.0416 mL	0.2079 mL	0.4158 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

Rorick-Kehn LM, et al. A Novel, Orally Bioavailable Nociceptin Receptor Antagonist, LY2940094, Reduces Ethanol Self-Administration and Ethanol Seeking in Animal Models. *Alcohol Clin Exp Res.* 2016 May;40(5):945-54.

Li Z, Xu Y, Li R, et al. BTRX-246040 acts through the ventrolateral periaqueductal gray to exert antidepressant-relevant actions in mice. *International Journal of Neuropsychopharmacology.* 2023: pyad027.

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