# Data Sheet (Cat.No.T11909)



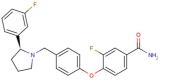
#### LY2444296

### **Chemical Properties**

CAS No.: 1346133-11-6 Formula: C24H22F2N2O2

Molecular Weight: 408.44
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

| Description                | LY2444296 exhibits anti-anxiety like effects. LY2444296 is an orally bioavailable, high-affinity and selective short-acting kappa opioid receptor (KOPR) antagonist, with a Ki value of $\sim 1$ nM.   |
|----------------------------|--|
| Targets(IC <sub>50</sub> ) | KOPR(ki): ki: ~1 nM  |
| In vivo                    | LY2444296 reduces anxiety-like and depressive-like behaviors, as well as CORT release, in rats tested after chronic extended access cocaine self-administration, but not in cocaine-naïve rats[2].LY2444296 displays antianxiety like effects in the EPM test[1]. LY2444296 (3 mg/kg; i.p.; 30 min before U69,593 administration) prevents behavioral and neuroendocrine effects caused by the reference kappa agonist U69,593 in cocaine-naïve rats[2]. |

# **Solubility Information**

| Solubility | Ethanol: 27.5 mg/mL (67.33 mM)<br>MEthanol: 5 mg/mL (12.24 mM)  |
|------------|---|
|            | (< 1 mg/ml refers to the product slightly soluble or insoluble) |

#### **Preparing Stock Solutions**

|       | 1mg      | 5mg       | 10mg      |
|-------|----------|-----------|-----------|
| 1 mM  | 2.448 mL | 12.242 mL | 24.483 mL |
| 5 mM  | 0.49 mL  | 2.448 mL  | 4.897 mL  |
| 10 mM | 0.245 mL | 1.224 mL  | 2.448 mL  |
| 50 mM | 0.049 mL | 0.245 mL  | 0.49 mL   |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

- 1. Huang P, et al. Two short-acting kappa opioid receptor antagonists (zyklophin and LY2444296) exhibited different behavioral effects from the long-acting antagonist norbinaltorphimine in mouse anxiety tests. Neurosci Lett. 2016 Feb 26;615:15-20.
- 2. Valenza M, et al. "Effects of the novel relatively short-acting kappa opioid receptor antagonist LY2444296 in behaviors observed after chronic extended-access cocaine self-administration in rats". Psychopharmacology (Berl). 2017 Aug;234(15):2219-2231.

Page 1 of 2 www.targetmol.com

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Page 2 of 2 www.targetmol.com