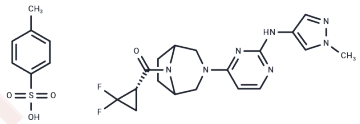
# Data Sheet (Cat.No.T12427)

TargetMol

## Brepocitinib P-Tosylate

### Chemical Properties



CAS No. : 2140301-96-6

Formula: C25H29F2N7O4S

Molecular Weight: 561.6

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 | Brepocitinib P-Tosylate (PF-06700841 P-Tosylate) is a potent dual inhibitor of Janus kinase 1 (JAK1) and TYK2 (IC50s of 17 nM and 23 nM, respectively). |
| Targets(IC50) | JAK |
| In vitro | PF-06700841 has good potency against IL6/pStat1 in the CD3+ cellular subset (IC50 of 81 nM), but lower inhibition of IL6/pSTAT3, again in the CD3+ cellular subset (IC50 of 641 nM). |
| In vivo | PF-06700841 (oral administration; for 7 consecutive days; female Lewis rats) treatment significantly reduces paw volume increase in a dose-dependent manner[1]. |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 23.33 mg/mL (41.54 mM),Sonication is recommended.<br>(< 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 (3.56 mM),Sonication is recommended.<br>*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.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.7806 mL | 8.9031 mL | 17.8063 mL |
| 5 mM | 0.3561 mL | 1.7806 mL | 3.5613 mL |
| 10 mM | 0.1781 mL | 0.8903 mL | 1.7806 mL |
| 50 mM | 0.0356 mL | 0.1781 mL | 0.3561 mL |

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

Fensome A, et al. Dual Inhibition of TYK2 and JAK1 for the Treatment of Autoimmune Diseases: Discovery of (( S) -2,2-Difluorocyclopropyl)((1 R,5 S)-3-(2-((1-methyl-1 H-pyrazol-4-yl)amino)pyrimidin-4-yl)-3,8-diazabicyclo[3.2.1] octan-8-yl)methanone (PF-06700841). J Med Chem. 2018 Oct 11;61(19):8597-8612.