



上海源叶生物科技有限公司  
Shanghai yuanye Bio-Technology Co., Ltd  
电话: 021-61312973 传真: 021-55068248  
网址: [www.shyuanye.com](http://www.shyuanye.com)  
邮箱: shyysw@sina.com

## 产品名称: BMS-582949 (hydrochloride)

## 产品别名: BMS-582949 hydrochloride

### 生物活性:

|                           |  |   |           |            |            |  |  |
|---------------------------|--|---|-----------|------------|------------|--|--|
| Description               | BMS-582949 hydrochloride is an orally active and highly selective p38 $\alpha$ MAPK inhibitor, with an IC <sub>50</sub> of 13 nM. BMS-582949 hydrochloride displays a significantly improved pharmacokinetic profile and is effective in inflammatory disease[1].  |   |           |            |            |  |  |
| IC <sub>50</sub> & Target | p38 $\alpha$ MAPK  | TNF $\alpha$  |           |            |            |  |  |
|                           | 13 nM (IC <sub>50</sub> )  | 50 nM (IC <sub>50</sub> , in cells)   |           |            |            |  |  |
| In Vitro                  | BMS-582949 displays a p38 $\alpha$ IC <sub>50</sub> of 13 nM and a cellular TNF $\alpha$ IC <sub>50</sub> of 50 nM[1].<br>BMS-582949 is a weak inhibitor of CYP3A4 BMS-582949 displays >2000-fold selectivity for p38 $\alpha$ over a diverse panel of 57 kinases that include serine kinases, nonreceptor tyrosine kinases, receptor tyrosine kinases, and the p38 $\gamma$ and $\delta$ isoforms[1]. |   |           |            |            |  |  |
| In Vivo                   | BMS-582949 (5-100 mg/kg, orally) is effective in both the acute murine model of inflammation and rat adjuvant arthritis model despite its slightly reduced potency[1].   |   |           |            |            |  |  |
|                           | Animal Model:  | Male Sprague-Dawley rats (250-300 g) adjuvant arthritis model[1].   |           |            |            |  |  |
|                           | Dosage:  | 1, 10, 100 mg/kg.   |           |            |            |  |  |
|                           | Administration:  | Orally once daily (from day 11 to day 19).  |           |            |            |  |  |
|                           | Result:  | Displayed dose-dependent reduction in paw swelling with qd dosing, with efficacy observed at doses of 10 and 100 mg/kg. |           |            |            |  |  |
| Solvent&Solubility        | <b>In Vitro:</b><br>DMSO : 25 mg/mL (56.44 mM; Need ultrasonic)  |   |           |            |            |  |  |
|                           | Preparing Stock Solutions  | Solvent / Mass<br>Concentration   | 1 mg      | 5 mg       | 10 mg      |  |  |
|                           |  | 1 mM  | 2.2576 mL | 11.2882 mL | 22.5764 mL |  |  |
|                           |  | 5 mM  | 0.4515 mL | 2.2576 mL  | 4.5153 mL  |  |  |
|                           |  | 10 mM   | 0.2258 mL | 1.1288 mL  | 2.2576 mL  |  |  |
|                           | *请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液; 一旦配成溶液, 请分装保存, 避免反复冻融造成的产品失效。  |   |           |            |            |  |  |
|                           | 储备液的保存方式和期限 -80°C, 6 months; -20°C, 1 month。 -80°C 储存时, 请在 6 个月内使用, -20°C 储存时, 请在 1 个月内使用。   |   |           |            |            |  |  |
|                           | <b>In Vivo:</b><br>请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 In Vitro 方式配制澄清的储备液, 再依次添加助溶剂:<br>——为保证实验结果的可靠性, 澄清的储备液可以根据储存条件, 适当保存; 体内实验的工作液, 建议您现用现配, 当天使用; 以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比; 如在配制过程中出现沉淀、析出现象, 可以通过加热和/或超声的方式助溶   |   |           |            |            |  |  |
|                           | 1.请依序添加每种溶剂: 10% DMSO → 90% corn oil   |   |           |            |            |  |  |
|                           | Solubility: ≥ 2.5 mg/mL (5.64 mM); Clear solution  |   |           |            |            |  |  |
|                           | 此方案可获得 ≥ 2.5 mg/mL (5.64 mM, 饱和度未知) 的澄清溶液, 此方案不适用于实验周期在半个月以上的实验。   |   |           |            |            |  |  |



上海源叶生物科技有限公司  
Shanghai yuanYe Bio-Technology Co., Ltd  
电话: 021-61312973 传真: 021-55068248  
网址: [www.shyuanye.com](http://www.shyuanye.com)  
邮箱: [shyysw@sina.com](mailto:shyysw@sina.com)

|                   |  |
|-------------------|--|
|                   | 以 1 mL 工作液为例, 取 100 $\mu$ L 25.0 mg/mL 的澄清 DMSO 储备液加到 900 $\mu$ L 玉米油中, 混合均匀。  |
| <b>References</b> | [1]. Liu C, et al. Discovery of 4-(5-(cyclopropylcarbamoyl)-2-methylphenylamino)-5-methyl-N-propylpyrrolo[1,2-f][1,2,4]triazine-6-carboxamide (BMS-582949), a clinical p38 $\alpha$ MAP kinase inhibitor for the treatment of inflammatory diseases. J Med Chem. 2010 Sep 23;53(18):6629-39. |



# 源叶生物