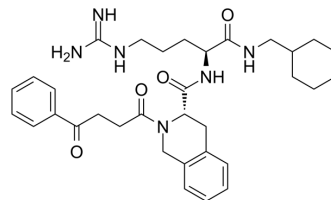


## PS372424

<b>Cat. No.:</b>	HY-111149		
<b>CAS No.:</b>	914291-61-5		
<b>Molecular Formula:</b>	C <sub>33</sub> H <sub>44</sub> N <sub>6</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	588.74		
<b>Target:</b>	CXCR		
<b>Pathway:</b>	GPCR/G Protein; Immunology/Inflammation		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	PS372424, a three amino-acid fragment of CXCL10, is a specific human CXCR3 agonist with anti-inflammatory activity. PS372424 prevents human T-cell migration in a humanized model of arthritic inflammation <sup>[1][2]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	Human CXCR3								
<b>In Vitro</b>	<p>PS372424 (100 ng/mL) increases p-Erk1 and p-Erk2 in U87-CXCR3-A cells after 5 min of stimulation<sup>[1]</sup>.</p> <p>PS372424 (10-200 nM; 30 min) causes a concentration-dependent phosphorylation of CCR5 on CXCR3<sup>+</sup> T cells not in CXCR3<sup>-</sup> T cells<sup>[2]</sup>.</p> <p>PS372424 competes for binding of radiolabeled CXCL10 to membranes prepared from HEK293/CXCR3 Gq15 cells with an IC<sub>50</sub> of 42±21 nM<sup>[3]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis<sup>[2]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>CXCR3<sup>+</sup> T cells and CXCR3<sup>-</sup> T cells</td> </tr> <tr> <td>Concentration:</td> <td>10, 50, 100, or 200 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>30 minutes</td> </tr> <tr> <td>Result:</td> <td>Caused a concentration-dependent phosphorylation of CCR5 on CXCR3<sup>+</sup> T cells. Did not result in phosphorylation of CCR5 on CXCR3<sup>-</sup> T cells.</td> </tr> </table>	Cell Line:	CXCR3 <sup>+</sup> T cells and CXCR3 <sup>-</sup> T cells	Concentration:	10, 50, 100, or 200 nM	Incubation Time:	30 minutes	Result:	Caused a concentration-dependent phosphorylation of CCR5 on CXCR3 <sup>+</sup> T cells. Did not result in phosphorylation of CCR5 on CXCR3 <sup>-</sup> T cells.
Cell Line:	CXCR3 <sup>+</sup> T cells and CXCR3 <sup>-</sup> T cells								
Concentration:	10, 50, 100, or 200 nM								
Incubation Time:	30 minutes								
Result:	Caused a concentration-dependent phosphorylation of CCR5 on CXCR3 <sup>+</sup> T cells. Did not result in phosphorylation of CCR5 on CXCR3 <sup>-</sup> T cells.								

### REFERENCES

- [1]. Boyé K, et al. The role of CXCR3/LRP1 cross-talk in the invasion of primary brain tumors. *Nat Commun.* 2017 Nov 17;8(1):1571.
- [2]. O'Boyle G, et al. Chemokine receptor CXCR3 agonist prevents human T-cell migration in a humanized model of arthritic inflammation. *Proc Natl Acad Sci U S A.* 2012 Mar 20;109(12):4598-603.
- [3]. Stroke IL, et al. Identification of CXCR3 receptor agonists in combinatorial small-molecule libraries. *Biochem Biophys Res Commun.* 2006 Oct 13;349(1):221-8.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA