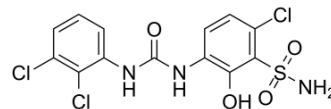


SB-332235

Cat. No.:	HY-16981
CAS No.:	276702-15-9
Molecular Formula:	C ₁₃ H ₁₀ Cl ₃ N ₃ O ₄ S
Molecular Weight:	410.66
Target:	CXCR
Pathway:	GPCR/G Protein; Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	SB-332235 is a potent, orally active nonpeptide CXCR2 antagonist, with an IC ₅₀ of 7.7 nM. SB-332235 displays 285-fold selectivity for CXCR2 over CXCR1. SB-332235 inhibits acute and chronic models of arthritis in the rabbit. SB-332235 inhibits viability of AML cells ^{[1][2]} .								
In Vitro	<p>SB-332235 (1-100 μM; 48 hours) inhibits viability of AML cell lines^[2].</p> <p>Cell Viability Assay^[2]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>AML cell</td> </tr> <tr> <td>Concentration:</td> <td>1, 10, 100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Led to a dose-dependent decrease in proliferation in all cell lines.</td> </tr> </table>	Cell Line:	AML cell	Concentration:	1, 10, 100 μM	Incubation Time:	48 hours	Result:	Led to a dose-dependent decrease in proliferation in all cell lines.
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In Vivo	<p>SB-332235 (25 mg/kg, p.o., b.i.d.) exhibits significantly reduced numbers of total leukocytes in synovial fluids from IL-8-injected knees^[1].</p> <p>SB-332235 (10-25 mg/kg; p.o.; twice a day for 14 days) inhibits chronic Ag-induced arthritis^[1].</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Adult female New Zealand White rabbits (chronic OVA-induced model of arthritis)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>10, 25 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>P.o.; twice a day for 14 days</td> </tr> <tr> <td>Result:</td> <td>Day-15 synovial fluid leukocyte numbers in OVA-injected knees were significantly reduced in rabbits. The decrease in neutrophils, monocytes, and lymphocytes resulting from treatment with 25 mg/kg of the antagonist was accompanied by a significant reduction in synovial fluid PGE₂, LT_{B4}, LTC₄, and IL-8 levels.</td> </tr> </table>	Animal Model:	Adult female New Zealand White rabbits (chronic OVA-induced model of arthritis) ^[1]	Dosage:	10, 25 mg/kg	Administration:	P.o.; twice a day for 14 days	Result:	Day-15 synovial fluid leukocyte numbers in OVA-injected knees were significantly reduced in rabbits. The decrease in neutrophils, monocytes, and lymphocytes resulting from treatment with 25 mg/kg of the antagonist was accompanied by a significant reduction in synovial fluid PGE ₂ , LT _{B4} , LTC ₄ , and IL-8 levels.
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REFERENCES

[1]. Podolin PL, et al. A potent and selective nonpeptide antagonist of CXCR2 inhibits acute and chronic models of arthritis in the rabbit. J Immunol. 2002;169(11):6435-6444.

[2]. Schinke C, et al. IL8-CXCR2 pathway inhibition as a therapeutic strategy against MDS and AML stem cells [published correction appears in Blood. 2015 Jul 16;126(3):425. Barreryo, Laura [corrected to Barreyro, Laura]]. Blood. 2015;125(20):3144-3152.

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

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