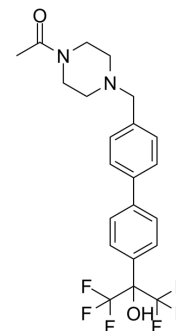


SR1555

Cat. No.:	HY-120785
CAS No.:	1386439-51-5
Molecular Formula:	C ₂₂ H ₂₂ F ₆ N ₂ O ₂
Molecular Weight:	460.41
Target:	ROR
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	SR1555 is a specific retinoic acid receptor-related orphan nuclear receptor γ (ROR γ) inverse agonist with an IC ₅₀ value of 1 μ M. SR1555 not only inhibits TH17 cell development and function but also increases the frequency of T regulatory cells, as well as inhibits the expression of IL-17. SR1555 can be used for researching autoimmune diseases ^[1] .																
IC₅₀ & Target	ROR γ 1 μ M (IC ₅₀)																
In Vitro	<p>SR1555 (10 μM; 24 h) inhibits Il17a gene expression by greater than 70% in EL4 cells^[1].</p> <p>SR1555 (10 μM; 24 h) inhibits IL-17 protein expression, inhibits T_H17 cell differentiation and function, and does not induce cell death during T_H17 cell differentiation^[1].</p> <p>SR1555 (10 μM; 24 h) effectively increases the gene expression of Foxp3 while simultaneously suppressing the gene expression of Rorγt^[1].</p> <p>SR1555 increases the frequency of T regulatory cells as evidenced by the almost 2-fold increase in the expression of Foxp3+ T cells in the splenocyte culture^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>RT-PCR^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>EL4 cells</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited Il17a gene expression by greater than 70%.</td> </tr> </table> <p>Cell Differentiation Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>Splenocytes (cultured under T_H17 polarizing conditions for 3 days)</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited IL-17 protein expression, inhibited T_H17 cell differentiation and function, and did not induce cell death during T_H17 cell differentiation.</td> </tr> </table>	Cell Line:	EL4 cells	Concentration:	10 μ M	Incubation Time:	24 h	Result:	Inhibited Il17a gene expression by greater than 70%.	Cell Line:	Splenocytes (cultured under T _H 17 polarizing conditions for 3 days)	Concentration:	10 μ M	Incubation Time:	24 h	Result:	Inhibited IL-17 protein expression, inhibited T _H 17 cell differentiation and function, and did not induce cell death during T _H 17 cell differentiation.
Cell Line:	EL4 cells																
Concentration:	10 μ M																
Incubation Time:	24 h																
Result:	Inhibited Il17a gene expression by greater than 70%.																
Cell Line:	Splenocytes (cultured under T _H 17 polarizing conditions for 3 days)																
Concentration:	10 μ M																
Incubation Time:	24 h																
Result:	Inhibited IL-17 protein expression, inhibited T _H 17 cell differentiation and function, and did not induce cell death during T _H 17 cell differentiation.																

RT-PCR^[1]

Cell Line:	Splenocytes (cultured under T regulatory cell polarizing conditions for 3 days)
Concentration:	10 μ M
Incubation Time:	24 h
Result:	Effectively increased the gene expression of Foxp3 while simultaneously suppressing the gene expression of Ror γ t.

REFERENCES

[1]. Solt LA, Kumar N, He Y, Kamenecka TM, Griffin PR, Burris TP. Identification of a selective ROR γ ligand that suppresses T(H)17 cells and stimulates T regulatory cells. ACS Chem Biol. 2012 Sep 21;7(9):1515-9.

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

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