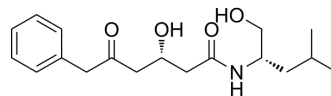


## IKK $\beta$ -IN-3

Cat. No.:	HY-163412
Molecular Formula:	C <sub>18</sub> H <sub>27</sub> NO <sub>4</sub>
Molecular Weight:	321.41
Target:	IKK
Pathway:	NF- $\kappa$ B
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	IKK $\beta$ -IN-3 (Compound hit4) is a IKK $\beta$ inhibitor with an IC <sub>50</sub> value of 30.4 nM. IKK $\beta$ is a key enzyme in the NF- $\kappa$ B signaling pathway and is involved in the development of many diseases. IKK $\beta$ -IN-3 can be used in the study of CAF-induced arthritis <sup>[1]</sup> .																
<b>IC<sub>50</sub> &amp; Target</b>	IKK $\beta$ 30.4 nM (IC <sub>50</sub> )																
<b>In Vivo</b>	<p>IKK<math>\beta</math>-IN-3 (Compound hit4) (10, 30 mg/kg; 1 dose, 14 days) can reduce inflammation in complete Freund's adjuvant-induced arthritis (AIA) rat model<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Adjuvant-induced arthritis (AIA) rat model<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>10 and 30 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>gastric gavage (i.g.)</td> </tr> <tr> <td>Result:</td> <td>At 30 mg/kg, significantly reduced rat paw swelling, inflammatory cell infiltration and hyperemia of the synovium.</td> </tr> <tr> <td>Animal Model:</td> <td></td> </tr> <tr> <td>Dosage:</td> <td></td> </tr> <tr> <td>Administration:</td> <td></td> </tr> <tr> <td>Result:</td> <td></td> </tr> </table>	Animal Model:	Adjuvant-induced arthritis (AIA) rat model <sup>[1]</sup>	Dosage:	10 and 30 mg/kg	Administration:	gastric gavage (i.g.)	Result:	At 30 mg/kg, significantly reduced rat paw swelling, inflammatory cell infiltration and hyperemia of the synovium.	Animal Model:		Dosage:		Administration:		Result:	
Animal Model:	Adjuvant-induced arthritis (AIA) rat model <sup>[1]</sup>																
Dosage:	10 and 30 mg/kg																
Administration:	gastric gavage (i.g.)																
Result:	At 30 mg/kg, significantly reduced rat paw swelling, inflammatory cell infiltration and hyperemia of the synovium.																
Animal Model:																	
Dosage:																	
Administration:																	
Result:																	

### REFERENCES

[1]. Li L, et al. The discovery of a novel I $\kappa$ B kinase  $\beta$  inhibitor based on pharmacophore modeling, virtual screening and biological evaluation. *Future Med Chem.* 2024;16(6):531-544.

---

**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