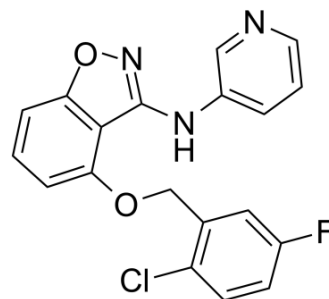


## SMS2-IN-2

Cat. No.:	HY-112713
CAS No.:	2241838-28-6
Molecular Formula:	C <sub>19</sub> H <sub>13</sub> ClFN <sub>3</sub> O <sub>2</sub>
Molecular Weight:	369.78
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the COA.



### BIOLOGICAL ACTIVITY

<b>Description</b>	SMS2-IN-2 is a potent, highly selective and orally active <b>sphingomyelin synthase 2 (SMS2)</b> inhibitor, with IC <sub>50</sub> s of 100 nM and 56 μM for SMS2 and SMS1, respectively. Anti-chronic inflammatory activity <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 100 nM (SMS2), 56 μM (SMS1) <sup>[1]</sup>								
<b>In Vivo</b>	SMS2-IN-2 (Compound 15w; 20, 50 mg/kg/day, p.o. for 6 weeks) reduces chronic inflammation in the db/db mice <sup>[1]</sup> . <table border="1" data-bbox="344 1045 1515 1276"> <tr> <td><b>Animal Model:</b></td> <td>Type 2 diabetes mellitus (T2DM) db/db mouse model (four-to-five week)<sup>[1]</sup></td> </tr> <tr> <td><b>Dosage:</b></td> <td>20, 50 mg/kg/day</td> </tr> <tr> <td><b>Administration:</b></td> <td>P.O. daily for 6 weeks</td> </tr> <tr> <td><b>Result:</b></td> <td>Significantly reduced IL-6 and insulin levels.</td> </tr> </table>	<b>Animal Model:</b>	Type 2 diabetes mellitus (T2DM) db/db mouse model (four-to-five week) <sup>[1]</sup>	<b>Dosage:</b>	20, 50 mg/kg/day	<b>Administration:</b>	P.O. daily for 6 weeks	<b>Result:</b>	Significantly reduced IL-6 and insulin levels.
<b>Animal Model:</b>	Type 2 diabetes mellitus (T2DM) db/db mouse model (four-to-five week) <sup>[1]</sup>								
<b>Dosage:</b>	20, 50 mg/kg/day								
<b>Administration:</b>	P.O. daily for 6 weeks								
<b>Result:</b>	Significantly reduced IL-6 and insulin levels.								

### REFERENCES

[1]. Mo M, et al. Discovery of 4-Benzyloxybenzo[ d]isoxazole-3-amine Derivatives as Highly Selective and Orally Efficacious Human Sphingomyelin Synthase 2 Inhibitors that Reduce Chronic Inflammation in db/ db Mice. J Med Chem. 2018 Sep 27;61(18):8241-8254.

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

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