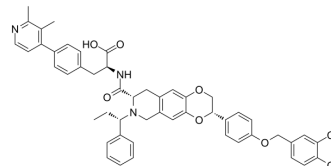


## TT-OAD2 free base

<b>Cat. No.:</b>	HY-129658
<b>CAS No.:</b>	1246826-07-2
<b>Molecular Formula:</b>	C <sub>50</sub> H <sub>47</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	856.83
<b>Target:</b>	Glucagon Receptor
<b>Pathway:</b>	GPCR/G Protein
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	TT-OAD2 free base is a non-peptide glucagon-like peptide-1 (GLP-1) receptor agonist with an EC <sub>50</sub> of 5 nM. TT-OAD2 free base has the potential for diabetes treatment <sup>[1][2]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	EC <sub>50</sub> : 5 nM (GLP-1 receptor) <sup>[2]</sup>								
<b>In Vitro</b>	TT-OAD2 (0-10 μM) inhibits GLP-1- and oxyntomodulin-mediated cAMP, calcium, pERK1/2 and β-arrestin responses in a concentration-dependent manner in HEK293A cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	TT-OAD2 (3 mg/kg; intravenous injection; male human GLP-1 receptor knock-in and knockout mice) treatment induces plasma insulin in an acute IVGTT on humanized GLP-1R knock-in (KI) and GLP-1R knockout (KO) mice <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>Male human GLP-1 receptor knock-in and knockout mice (6-11 months of age) with intravenous glucose tolerance tests<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>3 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intravenous injection (Single dose)</td> </tr> <tr> <td>Result:</td> <td>Induced plasma insulin.</td> </tr> </table>	Animal Model:	Male human GLP-1 receptor knock-in and knockout mice (6-11 months of age) with intravenous glucose tolerance tests <sup>[1]</sup>	Dosage:	3 mg/kg	Administration:	Intravenous injection (Single dose)	Result:	Induced plasma insulin.
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### REFERENCES

- [1]. Transtech Pharma, et al. Substituted azoanthracene derivatives, pharmaceutical compositions, and methods of use thereof. WO2010114824A1.
- [2]. Zhao P, et al. Activation of the GLP-1 receptor by a non-peptidic agonist. Nature. 2020 Jan;577(7790):432-436.

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

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