

# FAA1 agonist-1

## Catalog No: tcsc0023823



### Available Sizes

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**Size:** 1mg

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**Size:** 5mg

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**Size:** 10mg

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**Size:** 25mg

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**Size:** 50mg

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**Size:** 100mg

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### Specifications

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**CAS No:**  
2102196-57-4

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**Formula:**  
 $C_{21}H_{17}ClO_5S$

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**Pathway:**  
GPCR/G Protein

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**Target:**  
GPR40

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**Purity / Grade:**  
>98%

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**Solubility:**  
DMSO : 160 mg/mL (383.81 mM; Need ultrasonic and warming)

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**Observed Molecular Weight:**  
416.87

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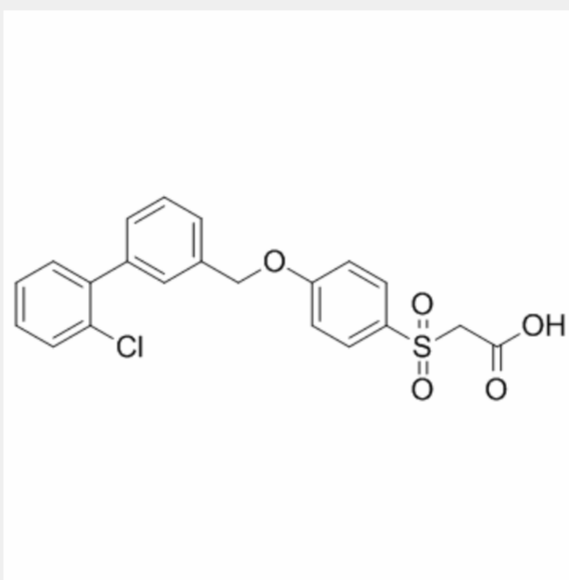
## Product Description

FAA1 agonist-1 is a potent **free fatty acid receptor 1 (FAA1/ GPR40)** agonist with a **pEC<sub>50</sub>** of 7.54.

IC50 & Target: pEC<sub>50</sub>: 7.54 (FAA1/GPR40)<sup>[1]</sup>

**In Vitro:** FAA1 agonist-1 (compound 20) (10 mg/kg) presents superior pharmacokinetic (PK) profiles, in particular, a high maximum concentration ( $C_{max}$  = 2563.52 µg/L), low clearance (CL = 0.154 L/h/kg), long plasma half-life ( $T_{1/2}$  = 5.57 h) and results in a high exposure ( $AUC_{0-24h}$  = 30204.43 µg/L·h). FAA1 agonist-1 also tends to have a low risk of activating caspase-3/7<sup>[1]</sup>.

**In Vivo:** Single oral administration of FAA1 agonist-1 (compound 20) robustly reduces the plasma glucose excursion and enhances insulin secretion during an oral glucose tolerance test (OGTT) in a dose-dependent manner from 1 to 10 mg/kg when FAA1 agonist-1 is dosed 60 min prior to the oral glucose challenge. The area under the curve of blood glucose ( $AUC_{0-120min}$ ) and blood insulin ( $AUC_{0-120min}$ ) reveal that the minimum effective dose of FAA1 agonist-1 is 3 mg/kg. The hyperglycemia state is also markedly improved in FAA1 agonist-1 (20 mg/kg) treated group<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!