GLP-1R Potentiator – BETP

Chemical Name: 4-(3-(benzyloxy)phenyl)-2-(ethylsulfinyl)-6-(trifluoromethyl)pyrimidine

<table>
<thead>
<tr>
<th>Molecular Weight:</th>
<th>406.42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula:</td>
<td>C_{20}H_{17}F_{3}N_{2}O_{2}S</td>
</tr>
<tr>
<td>Purity:</td>
<td>≥98%</td>
</tr>
<tr>
<td>CAS#:</td>
<td>1371569-69-5</td>
</tr>
<tr>
<td>Solubility:</td>
<td>DMSO up to 100 mM</td>
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</tbody>
</table>
| Storage:            | Powder: 4 °C 1 year  
                          DMSO: 4 °C 3 months  
                          -20 °C 1 year |

Biological Activity:

BETP is positive allosteric modulator and partial agonist of the glucagon-like peptide 1 (GLP-1) receptor. It covalently modifies cysteines 347 and 438 in GLP-1R. Specificity studies have shown that it has no activity on GLP-2, GIP, PTH or glucagon receptors. BETP has been shown to potentiate GLP-1R–dependent intracellular calcium mobilization but not cAMP accumulation in response to GLP-1(7-36)NH2 in recombinant cell lines. Conversely, BETP can enhance cAMP efficacy of GLP-1(9-36)NH2 at GLP-1R but not intracellular calcium mobilization. BETP also potentiates cAMP production of the dual-acting GLP-1R/glucagon (GCG) receptor (GCGR) agonist oxyntomodulin at GLP-1R. It promotes GLP-1(9-36)NH2–mediated glucose-dependent insulin secretion in rodent and human islet preparations as well as in rodent models following intravenous administration.

How to Use:

**In vitro:** BETP was used at 5-20 µM in vitro and cellular assays.

**In vivo:** BETP was administered through intravenous administration at 5 mg/kg to Wistar rats for IVGTT (In Vivo Intravenous Glucose Tolerance Test). Formulation: 10% ethanol-Solutol, 20% polyethylene glycol-400, and 70% phosphate-buffered saline, pH 7.4.

Reference:


Products are for research use only. Not for human use.