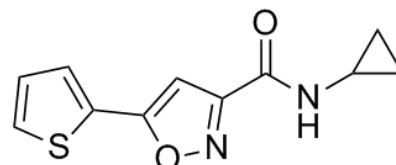


Product Name : ISX-9
Cat. No. : PC-42974
CAS No. : 832115-62-5
Molecular Formula : C₁₁H₁₀N₂O₂S
Molecular Weight : 234.2743
Target : Proton-sensing GPCRs
Solubility : DMSO: ≥ 37 mg/mL



Biological Activity

ISX-9 (Isoxazole 9) is a isoxazole stem cell-modulator small molecule and GPR68 ligand through a chemical biology-target discovery strategy to GPR68, a proton (pH) sensing G protein-coupled receptor.

ISX-9 induces neuronal differentiation of GPR68-expressing cells in hippocampus and primary cultures.

ISX-9 and GPR68 coregulates neuronal target genes such as Bex1 (brain-enriched X-linked protein-1) in hippocampal neural progenitors (HCN cells).

ISX-9 pharmacologically targets type 1 neural stem cells (NSCs), promoting neurogenesis in young mice, depleting the progenitor pool without adversely affecting hippocampal learning and memory function.

References

Schneider JW, et al. **ACS Chem Neurosci**. 2012 Jul 18;3(7):557-68.

Schneider JW, et al. **Nat Chem Biol**. 2008 Jul;4(7):408-10.

Bettio LE, et al. **Neuroscience**. 2016 Sep 22;332:212-22.

Bettio LEB, et al. **Neurogenesis (Austin)**. 2017 Jun 1;4(1):e1317692.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com