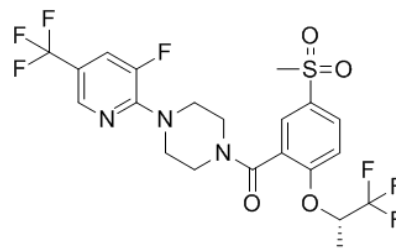


Product Name : Bitopertin
Cat. No. : PC-42706
CAS No. : 845614-11-1
Molecular Formula : C₂₁H₂₀F₇N₃O₄S
Molecular Weight : 543.455
Target : Glycine Transporter (GlyT)
Solubility : 10 mM in DMSO



Biological Activity

Bitopertin (RG1678, RO4917838) is a potent and selective glycine uptake **GlyT1** inhibitor with EC₅₀ of 30 nM, also is an **Nrf2** activator.

Bitopertin shows no activity for GlyT2, hERG, CYP450 enzymes above 10 uM.

Bitopertin shows brain penetration and excellent pharmacokinetic in vivo.

Bitopertin suppresses osteoclast differentiation and ameliorates ovariectomy-induced bone loss by activating Nrf2.

Bitopertin interacts with the Keap1 Kelch domain and decreases Keap1-Nrf2 binding, leading to reduced Nrf2 ubiquitination and degradation.

References

Pinard E, et al. *J Med Chem*. 2010 Jun 24;53(12):4603-14.

Alberati D, et al. *Neuropharmacology*. 2012 Feb;62(2):1152-61

Martin-Facklam M, et al. *Neuropsychopharmacology*. 2013 Feb;38(3):504-12.

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

E-mail: tech@probechem.com