CYN 154806 TFA

| Cat. No.: | HY-P1202A |
|----------------------|---|
| CAS No.: | 2828432-46-6 |
| Molecular Formula: | $C_{58}H_{69}F_{3}N_{12}O_{16}S_{2}$ |
| Molecular Weight: | |
| Sequence: | Ac-Phe(4-NO2)-Cys-Tyr-Trp-Lys-Thr-Cys-Tyr-NH2 (Disulfide bridge: Cys2-Cys7) |
| Sequence Shortening: | Ac-F(4-NO2)CYWKTCY-NH2 (Disulfide bridge: Cys2-Cys7) |
| Target: | Somatostatin Receptor |
| Pathway: | GPCR/G Protein; Neuronal Signaling |
| Storage: | Sealed storage, away from moisture |
| | Powder -80°C 2 years |
| | -20°C 1 year |
| | * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |

SOLVENT & SOLUBILITY

In Vitro

H₂O : ≥ 33.33 mg/mL (25.42 mM)

* "≥" means soluble, but saturation unknown.

| Preparing Stock Solutions | Solvent Mass Concentration | 1 mg | 5 mg | 10 mg |
|------------------------------|-------------------------------|-----------|-----------|-----------|
| | 1 mM | 0.7626 mL | 3.8128 mL | 7.6257 mL |
| | 5 mM | 0.1525 mL | 0.7626 mL | 1.5251 mL |
| | 10 mM | 0.0763 mL | 0.3813 mL | 0.7626 mL |

Please refer to the solubility information to select the appropriate solvent.

| BIOLOGICAL ACTIVITY | | | | |
|---------------------|--|--|--|--|
| BIOLOGICAL ACTIVITY | | | | |
| Description | CYN 154806 TFA, a cyclic octapeptide, is a potent and selective somatostatin sst2 receptor antagonist, with pIC ₅₀ values of 8.58, 5.41, 6.07, 5.76 and 6.48 for human recombinant sst2, sst1, sst3, sst4 and sst5 receptors respectively ^{[1][2]} . | | | |
| IC_{50} & Target | SSTR2 | | | |
| In Vitro | CYN 154806 TFA inhibits SRIF-induced increases in extracellular acidification (EAR) in CHO-K1 cells expressing human sst2 receptors (pKB 7.92). CYN 154806 TFA also blocks SRIF-induced increases [35S]-GTPγS binding in CHO-K1 cell membranes expressing human sst2 receptors as well as rat sst2(a) and rat sst2(b) receptors (pKB 7.81, 7.68 and 7.96, respectively) ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. | | | |
| In Vivo | CYN 154806 TFA (0.1 mg/kg; i.p.; 20 min before the administration of carbachol (CCh) (30 μg/kg) in M4 KO mice) dose- | | | |
| | | | | |

Product Data Sheet



dependently and significantly reverses the decreases acid response to CCh in M4 but not M3 KO mice^[3].

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CUSTOMER VALIDATION

• Appl Radiat Isot. 18 August 2022, 110425.

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REFERENCES

[1]. Bass RT, et al. Identification and characterization of novel somatostatin antagonists. Mol Pharmacol. 1996 Oct;50(4):709-15.

[2]. Feniuk W, et al. Selective somatostatin sst(2) receptor blockade with the novel cyclic octapeptide, CYN-154806. Neuropharmacology. 2000 Jun 8;39(8):1443-50.

[3]. Takeuchi K, et al. Activation of Muscarinic Acetylcholine Receptor Subtype 4 Is Essential for Cholinergic Stimulation of Gastric Acid Secretion: Relation to D Cell/Somatostatin. Front Pharmacol. 2016 Aug 30;7:278.

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

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