hFSH-β-(33-53) (TFA)

Cat. No.: HY-P3343A

Molecular Formula: $C_{117}H_{184}F_3N_{31}O_{34}S$

Molecular Weight: 2657.96

Sequence Shortening: YTRDLVYKDPARPKIQKTCTF

YTRDLVYKDPARPKIQKTCTF (TFA salt)

Target: Estrogen Receptor/ERR

Pathway: Vitamin D Related/Nuclear Receptor

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

DMSO : 100 mg/mL (37.62 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	0.3762 mL	1.8811 mL	3.7623 mL
	5 mM	0.0752 mL	0.3762 mL	0.7525 mL
	10 mM	0.0376 mL	0.1881 mL	0.3762 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (0.94 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (0.94 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (0.94 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

hFSH-β-(33-53) TFA, a thiol-containing peptide which corresponds to a second FSH receptor-binding domain, is a FSHR (follicle-stimulating hormone receptor) antagonist. hFSH-β-(33-53) TFA inhibits binding of FSH to receptor and is a partial agonist of estradiol synthesis in Sertoli cells[1][2][3].

REFERENCES

[1]. Grasso P, et al. A synthetic peptide corresponding to hFSH-beta-(81-95) has thioredoxin-like activity. Mol Cell Endocrinol. 1991;78(3):163-170.

[2]. Xu Y, et al. Pilot study of a novel (18)F-labeled FSHR probe for tumor imaging. Mol Imaging Biol. 2014;16(4):578-585.

[3]. Santa-Coloma TA, et al. Serine analogues of hFSH-beta-(33-53) and hFSH-beta-(81-95) inhibit hFSH binding to receptor. Biochem Biophys Res Commun. 1992;184(3):1273-1279.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA