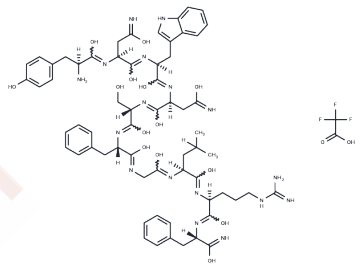
# Data Sheet (Cat.No.TP1345)

TargetMol

## Kisspeptin-10, human (TFA)(374675-21-5,FREE)

### Chemical Properties



CAS No. :

Formula: C63H83N17O14.C2HF3O2

Molecular Weight: 1416.46

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | Kisspeptin-10, human TFA is a potent vasoconstrictor and angiogenesis inhibitor. Kisspeptin-10, human TFA acts as a tumor metastasis suppressor via its receptor GPR54. Kisspeptin-10-GPR54 system plays an important role in embryonic kidney development. Kisspeptin-10/GPR54 signaling induces osteoblast differentiation via NFATc4-mediated BMP2 expression |
| Targets(IC50) | GPCR,Kisspeptin |
| In vitro | KP-10-treatment significantly increased the expression of osteogenic genes, including mRNA and protein levels of BMP2, in C3H10T1/2 cells.?Moreover, KP-10 induced BMP2-luc activity and increased phosphorylation of Smad1/5/9.?In addition, NFATc4 specifically mediated KP-10-induced BMP2 gene expression.?However, KP-10 treatment did not induce expression of the BMP2 and Runx2 genes in GPR54-/- cells.?To examine whether KP-10 induced secretion of BMP2 to the culture medium, we used the conditioned-medium (C.M) of KP-10 treated medium on C3H10T1/2 cells.?Dlx5 and Runx2 expressions were higher in GPR54-/- cells treated with C.M than in those treated with KP-10[1]. |

### Solubility Information

| | |
|---|---|
| Solubility | H2O: 4 mg/mL (2.82 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 0.706 mL | 3.5299 mL | 7.0599 mL |
| 5 mM | 0.1412 mL | 0.706 mL | 1.412 mL |
| 10 mM | 0.0706 mL | 0.353 mL | 0.706 mL |
| 50 mM | 0.0141 mL | 0.0706 mL | 0.1412 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Son HE, et al. Kisspeptin-10 (KP-10) stimulates osteoblast differentiation through GPR54-mediated regulation of BMP2 expression and activation. Sci Rep. 2018 Feb 1;8(1):2134.