



**ANA-12** 

**Catalog No: tcsc3616** 



## **Available Sizes**

Size: 10mg

Size: 50mg



## **Specifications**

CAS No:

219766-25-3

Formula:

 $C_{22}H_{21}N_3O_3S$ 

**Pathway:** 

Protein Tyrosine Kinase/RTK

**Target:** 

Trk Receptor

**Purity / Grade:** 

>98%

**Solubility:** 

DMSO: 9.09 mg/mL (22.31 mM; Need ultrasonic); H2O:

**Observed Molecular Weight:** 

407.49

## **Product Description**

ANA-12 is a potent and selective **TrkB** antagonist, and binds to TrkB<sup>ECD</sup>-Fc with  $\mathbf{K_d}$  of 12  $\mu$ M.

In Vitro: ANA-12 (10 nM) prevents BDNF-induced neurite outgrowth in the TrkB-expressing cells, and completely abolishes the effects of BDNF at concentrations up to 10-100  $\mu$ M<sup>[1]</sup>.

In Vivo: ANA-12 (0.5 mg/kg, i.p.) partially inhibits the total endogenous TrkB activity in the whole brain of mice. ANA-12, injected in





mice, demonstrates anxiolytic and antidepressive activities at 0.5 mg/kg. ANA-12 (0.5, 1.0, and 2.0 mg/kg) does not affect neuron survival<sup>[1]</sup>. ANA-12 (0.5 mg/kg) shows antidepressant effects in lipopolysaccharide (LPS)-induced depression-like behavior. ANA-12 (0.5 mg/kg) significantly attenuates an increased immobility time in depressed mice. In the TST, FST, and SPT, ANA-12 (0.5 mg/kg) does not show antidepressant-like effects in the control mice<sup>[2]</sup>. ANA-12 (0.5 mg/kg, i.p.) reverses the diminished self-administration of cocaine in CocSired rats<sup>[3]</sup>.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!