

ANA-12, TrkB antagonist

Catalog	Unit
TBI2828-5MG	5 mg
TBI2828-25MG	25 mg

Product Details

Formal Name: N-[2-[[[Hexahydro-2-oxo-1H-azepin-3-yl]amino]carbonyl]phenyl]benzo[b]thiophene-2-carboxamide

Alternate Names: Etacrynic acid

Molecular Formula: C₂₂H₂₁N₃O₃S

Formula Weight: 407.49

CAS Number: 219766-25-3

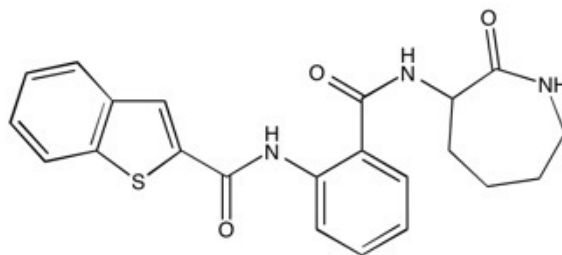
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 20 mg/ml).

Storage: -20°C

Stability: ≥ 2 years.



Applications

TrkB antagonist

Functions

TrkB receptor antagonist. Binds to two distinct receptor sites preventing activation by BDNF non-competitively, IC₅₀ = 45.6 nM and 41.1 μM for the high and low affinity sites respectively. Systemic administration to adult mice decreased TrkB activity in the brain without affecting neuronal survival or altering TrkA and TrkC functions. Displays antidepressant and anxiolytic properties in mouse models after systemic administration. Shows antidepressant effects on LPS-induced depression-like behavior in mice. Has been used to elucidate the role of BDNF in improvement of cognitive decline during calorie restriction and in the discovery of new neurotrophic agents.

Application Procedures

First dissolved in DMSO (up to 20 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20° for up to 2 months.

For research use only.