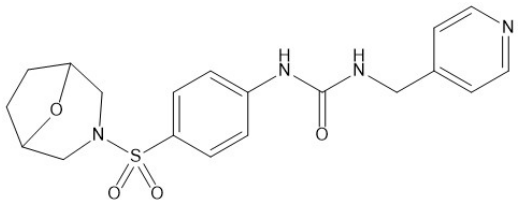
Tribioscience

SBI-797812, NAMPT activator

Catalog	Unit
TBI5778-5MG	5 mg
TBI5778-25MG	25 mg

Product Details

Formal Name: N-[4-(8-Oxa-3-azabicyclo[3.2.1]oct-3-ylsulfonyl)phenyl]-N′-(4-pyridinylmethyl)-urea
Molecular Formula: $C_{19}H_{22}N_4O_4S$
Formula Weight: 402.5
CAS Number: 2237268-08-3
Purity: >98%
Formulation: Powder
Solubility: Soluble in DMSO (30 mg/ml)
Storage: -20°C
Stability: ≥ 2 years.



Applications

NAMPT activator

Functions

NAMPT is the rate-limiting enzyme in the nicotinamide adenine dinucleotide (NAD^+) salvage pathway that converts nicotinamide to nicotinamide mononucleotide (NMN) which is responsible for most of the NAD^+ formation in mammals. Cellular levels of NAD+ have been shown to decrease with age and NAMPT is believed to be a key enzyme in the aging/senescence process. SBI-797812 is a NAMPT activator, turning it into a "super catalyst" that more efficiently generates NMN. It increases NMN levels and prevents NAD^+ feedback inhibition in a cell-free assay using recombinant human NAMPT at a concentration of 2 μM. In mice (20 mg/kg), it increases liver levels of NAD^+ and shows a trend toward increased levels in cardiac tissue but does not affect levels in the quadriceps, or gastrocnemius.

Application Procedures

First dissolved in Soluble in DMSO (30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.