

Catalog	Unit
TBI2381-10MG	10 mg
TBI2381-50MG	50 mg

Product Details

Formal Name: (2R*,3S*)-7-Bromo-6-chloro-3-[3-(3-hydroxy-2-piperidinyl)-2-oxopropyl]-4-3H-quinazolinone hydrobromide

Alternate Names: NSC 713205

Molecular Formula: C₁₆H₁₇BrClN₃O₃ • HBr

Formula Weight: 495.60

CAS Number: 64924-67-0

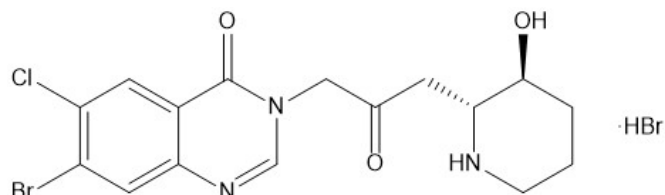
Purity: >95%

Formulation: powder

Solubility: Soluble in DMSO (up to 50 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

Prolyl-tRNA synthase inhibitor

Functions

Potent and selective glutamyl-prolyl-tRNA synthetase inhibitor (K_i=18.3 nM) derived from the natural product febrifugine. Exhibits little toxicity at concentrations (<10 μM) that reduce TMPRSS2 protein levels via enhanced ubiquitination and proteasomal degradation. Also attenuates TGF-β signaling, including reversibly reducing Smad3 protein and phosphorylation levels. Blocks fibrosis, angiogenesis, and tumor progression, as well as differentiation of TH17 immune cells. Simultaneously activates the Integrated Stress Response (ISR) and mTOR signaling in mouse embryo fibroblasts.

Application Procedures

First dissolved in DMSO (up to 50 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 2 months.

For research use only.