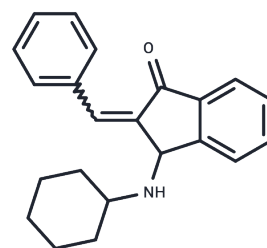


(E/Z)-BCI

Chemical Properties

CAS No. : 15982-84-0
Formula: C₂₂H₂₃NO
Molecular Weight: 317.42
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	(E/Z)-BCI (NSC-150117), a dual-specificity phosphatase 6 (DUSP6) inhibitor with anti-inflammatory properties, reduces LPS-induced inflammatory mediators and ROS production in macrophage cells by activating the Nrf2 signaling axis and inhibiting the NF-κB pathway.
Targets(IC50)	Apoptosis, Phosphatase
In vitro	(E/Z)-BCI hydrochloride (2-10 μM; 72 hours) significantly decreases cell viability in a time and dose-dependent manner in gastric epithelial cell GES1, GC cell lines, and AGS cell lines. (E/Z)-BCI hydrochloride (0.5-4 μM; 24 hours) significantly inhibits DUSP6 expression in LPS-activated macrophages. (E/Z)-BCI hydrochloride inhibits cell proliferation, migration, and invasion in a receptor-independent manner and enhances Cisplatin (CDDP) cytotoxicity (enhances CDDP-induced cell death and apoptosis) at pharmacological concentrations in gastric cancer (GC) cells. (E/Z)-BCI hydrochloride (0.5-2 μM; 24 hours) treatment significantly inhibits the expression of IL-1β, TNF-α, and IL-6 mRNA in LPS-activated macrophages. (E/Z)-BCI hydrochloride decreases ROS production and activates the Nrf2 pathway in LPS-activated macrophages.
In vivo	(E/Z)-BCI hydrochloride treatment enhances cisplatin efficacy in PDX models.

Solubility Information

Solubility	Ethanol: 20 mg/mL (60.00 mM) ,Sonication is recommended. DMSO: 60 mg/mL (189.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1504 mL	15.752 mL	31.504 mL
5 mM	0.6301 mL	3.1504 mL	6.3008 mL
10 mM	0.315 mL	1.5752 mL	3.1504 mL
50 mM	0.063 mL	0.315 mL	0.6301 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.

Reference

Zhang F, et al. DUSP6 Inhibitor (E/Z)-BCI Hydrochloride Attenuates Lipopolysaccharide-Induced Inflammatory Responses in Murine Macrophage Cells via Activating the Nrf2 Signaling Axis and Inhibiting the NF- κ B Pathway.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use

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