

7-Cl-O-Nec1, RIPK1 inhibitor; Necroptosis inhibitor

Catalog	Unit
TBI4544-5MG	5 mg
TBI4544-25MG	25 mg

Product Details

Formal Name: 5-((7-Chloro-1H-indol-3-yl)methyl)-3-methylimidazolidine-2,4-dione

Alternate Names: Nec-1s; Necrostatin1-S

Molecular Formula: C₁₃H₁₂ClN₃O₂

Formula Weight: 277.71

CAS Number: 852391-15-2

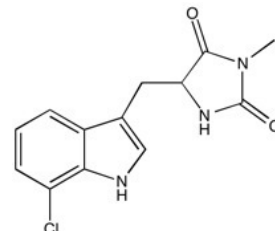
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 25 mg/ml).

Storage: -20°C

Stability: ≥ 1 year.



Applications

RIPK1 inhibitor; Necroptosis inhibitor

Functions

Necrostatin-1 analogue with superior potency (IC₅₀ = 206nM vs 494nM), selectivity and metabolic stability in blocking RIP1. 7-Cl-O-Nec-1 shows no off-target inhibition of indolamine-2,3-deoxygenase (IDO) in contrast to Necrostatin-1 (Nec-1). 7-Cl-O-Nec-1 showed higher activity in inhibiting necroptosis in Jurkat cells than Necrostatin-1 (EC₅₀ = 210 nM vs. EC₅₀ = 490 nM), no non-specific cytotoxicity at high concentrations (100 μM) and reasonable pharmacokinetic characteristics when used in mice. 7-Cl-O-Nec-1 is recommended for cellular and in vivo use over Necrostatin-1.

Application Procedures

First dissolved in DMSO (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20° for up to 3 months.

For research use only.