

# **Product Data Sheet**

# **Chemical Properties**

Product Name:	Necrostatin 2 0
Cas No.:	852391-19-6
M.Wt:	277.71 ON N
Formula:	C13H12CIN3O2
Synonyms:	MTH-DL-Tryptophan, H <sup>+</sup> Cl
Chemical Name:	(5R)-5-[(7-chloro-1H-indol-3-yl)methyl]-3-methylimidazolidine-2,4-di one
Canonical SMILES:	CN1C(=O)C(NC1=O)CC2=CNC3=C2C=CC=C3Cl
Solubility:	Soluble in DMSO
Storage:	Store at -20°C
General tips:	For obtaining a higher solubility , please warm the tube at 37 $^{\circ}$ C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20 $^{\circ}$ C for several months.
Shopping Condition:	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request

## **Biological Activity**

Targets :	Apoptosis

**Pathways:** TNF- $\alpha$ 

#### **Description:**

Necrostatin 2 (Nec-2) is a novel and potent necroptosis inhibitor with EC50 of 50 nM. It is an analog of necrostatin 1 (nec-1).

Necroptosis is a mechanism of necrotic cell death induced by apoptotic stimuli in the form of death domain receptor engagement by their respective ligands under conditions where apoptotic execution is prevented.

Nec-2 is efficacious in an animal model of ischemic stroke. Many Necroptosis inhibitor derivatives are designed for researchers. There is limited record for Nec-2, but some reports are related with other necrostatins. Nec-1, a small-molecule inhibitor of necroptosis, is also a selective allosteric inhibitor of the death domain receptor-associated adaptor kinase RIP1 in vitro.

#### Reference:

[1]. Teng X, Keys H, Jeevanandam A, Structure-activity relationship study of [1,2,3]thiadiazole necroptosis inhibitors. Bioorg Med Chem Lett. 2007 Dec 15;17(24):6836-40.

### **Product Citations**

1. Ma Y, Walsh MJ, et al. "CRISPR/Cas9 Screens Reveal Epstein-Barr Virus-Transformed B Cell Host Dependency Factors." Cell Host Microbe. 2017 May 10;21(5):580-591.e7. PMID:28494239

#### Caution

#### FOR RESEARCH PURPOSES ONLY.

#### NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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