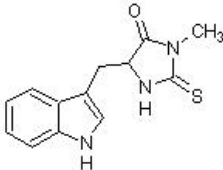


Product datasheet

# Necrostatin-1, necroptosis inhibitor ab141053

[15 References](#) [2 Images](#)

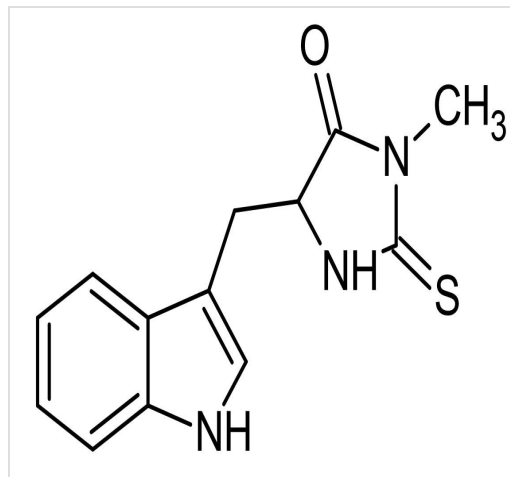
## Overview

Product name	Necrostatin-1, necroptosis inhibitor
Description	Potent, specific necroptosis inhibitor
Biological description	Potent, specific necroptosis inhibitor ( $EC_{50}$ = 490 nM). Selective allosteric inhibitor of death domain receptor-associated adaptor kinase RIP1 <i>in vitro</i> ( $EC_{50}$ = 182 nM). Caspase independent, programmed necrosis pathway.
Purity	> 99%
CAS Number	4311-88-0
Chemical structure	

## Properties

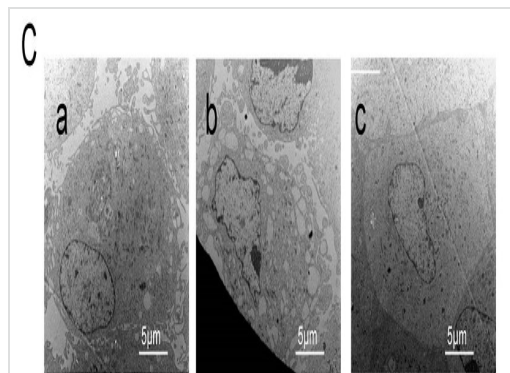
Chemical name	5-(1 <i>H</i> -Indol-3-ylmethyl)-3-methyl-2-thioxo-4-imidazolidinone
Molecular weight	259.33
Molecular formula	C <sub>13</sub> H <sub>13</sub> N <sub>3</sub> OS
PubChem identifier	2828334
Storage instructions	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in ethanol to 50 mM and in DMSO to 100 mM
Handling	<p>Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.</p> <p>Need more advice on solubility, usage and handling? Please visit our <a href="#">frequently asked questions (FAQ) page</a> for more details.</p>
SMILES	<chem>S=C3NC(Cc1cnc2ccccc12)C(=O)N3C</chem>

## Images



Chemical Structure - Necrostatin-1, necroptosis inhibitor (ab141053)

2D chemical structure image of ab141053, Necrostatin-1, necroptosis inhibitor



Functional Studies - Necrostatin-1, necroptosis inhibitor (ab141053)

Yan et al PLoS One. 2018 Nov 21;13(11):e0207760. doi: 10.1371/journal.pone.0207760. eCollection 2018. Fig 2. Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>

### Necroptosis exists in PDLSCs.

TEM, a representative normal cell (the cell had a long fusiform, cell membrane structure was complete, the nucleus was round, nucleolus was obvious and center), b representative necroptosis cell (cell membrane ruptured, organelle disappeared, chromatin consolidated and agglutinated, presenting necrotic ultrastructural characteristics), c representative necrosis cell after Nec-1 inhibited (the cell membrane was intact, and the chromatin structure returned to normal).

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