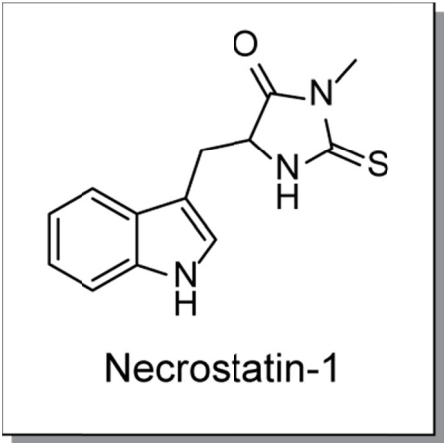




Product Specification Sheet

Product Name:	Necrostatin-1	
Catalog Number:	C6221-5 (powder) C6221-5s (10mM in DMSO)	
Package Size:	5 mg	
Technical information:		
Chemical Formula:	C ₁₃ H ₁₃ N ₃ OS	
CAS #:	4311-88-0	
Molecular Weight:	259.33	
Purity:	>98%	
Formulation:	Light Yellow solid	
Solubility:	Soluble in DMSO up to 50 mM	
Chemical Name:	5-((1H-indol-3-yl)methyl)-3-methyl-2-thioxoimidazolidin-4-one	
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.	
Handling:	<ul style="list-style-type: none">For C6221-5 (powder), add 1.928. mL of DMSO to make 10 mM solution.For C6221-5s, before open the vial, centrifuge the vial at 500rpm x 1 min in a 50 mL conical tube to ensure full recovery of sample.	
Biological Activity:	Necrostatin-1 is a specific ATP-competitive allosteric inhibitor (EC ₅₀ = 180 nM) of death domain receptor-associated adaptor kinase (RIP1) ¹ . It selectively blocks a specific programmed cell death pathway, necroptosis, which leads to necrosis. While affecting this distinct cell death pathway, Necrostatin-1 does not present any perturbation of the Fas/TNFR triggered canonical apoptosis cascade. Necrostatin-1 inhibits the necrosis-induced RIP1 and RIP3 interactions in vitro ² and reduces ischemic brain injury in a mouse model of stroke ³ .	
Reference:	<ol style="list-style-type: none">Degterev A., et al. Identification of RIP1 kinase as a specific cellular target of necrostatins. Nat. Chem. Biol. (2008), 4:313-321Sun L., et al. Mixed Lineage Kinase Domain-like Protein Mediates Necrosis Signaling Downstream of RIP3 Kinase. Cell (2012), 148:213-227.Degterev A., et al. Chemical inhibitor of nonapoptotic cell death with therapeutic potential for ischemic brain injury. Nat. Chem. Biol. (2005), 1:112-119	

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