



Product Information

Product ID C961001

CAS No. 1073612-91-5

Chemical Name 4-[[4-Oxo-2-thioxo-3-[3-(trifluoromethyl)benzyl]thiazolidin-5-ylidene]methyl]benzoicAcid

Synonym CY09

Formula C₁₉H₁₂F₃NO₃S₂

Formula Wt. 423.4

Melting Point

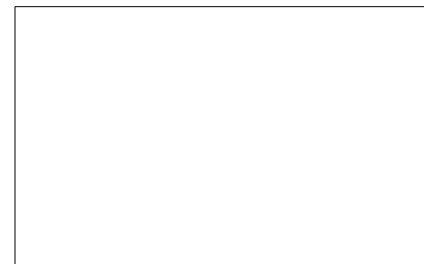
Purity 98%

Solubility

Store Temp -20°C

Ship Temp Ambient

Description CY-09 is a selective inhibitor of the NLRP3 inflammasome that directly binds to the Walker A motif of the NLRP3 NACHT domain, blocking its ATPase activity and subsequent inflammasome assembly. CY-09 inhibits caspase-1 activation and IL-18 maturation driven by NLRP3 without affecting NLRC4 or AIM2 inflammasomes. It has demonstrated efficacy in preclinical models of gout, type 2 diabetes, and other NLRP3-associated inflammatory diseases.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
C961001	5 mg	\$100.00
C961001	25 mg	\$375.00
C961001	100 mg	\$785.00

- References**
1. Jiang H, He H, Chen Y, et al. Identification of a selective and direct NLRP3 inhibitor to treat inflammatory disorders. J Exp Med. 2017;214(11):3318-3335. PMID: 28939913.
 2. He Y, Hara H, Núñez G. Mechanism and Regulation of NLRP3 Inflammasome Activation. Trends Biochem Sci. 2016;41(12):1012-1021. PMID: 27669683.
 3. Swanson KV, Deng M, Ting JP. The NLRP3 inflammasome: molecular activation and regulation to therapeutics. Nat Rev Immunol. 2019;19(8):477-489. PMID: 31086329.
 4. Guo C, Fu R, Wang S, et al. NLRP3 inflammasome activation contributes to the pathogenesis of rheumatoid arthritis. Clin Exp Immunol. 2018;194(2):231-243. PMID: 30144042.
 5. Shi H, Wang Y, Li X, et al. NLRP3 activation and mitosis are mutually exclusive events coordinated by NEK7, a new inflammasome component. Nat Immunol. 2016;17(3):250-8. PMID: 26642356.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.