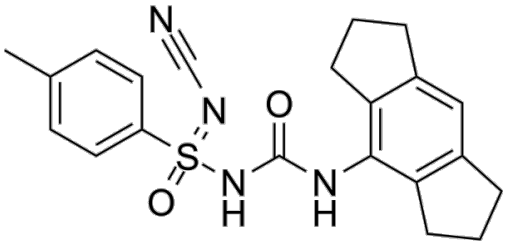
Product Data Sheet

Product Name: NLRP3-IN-17
Cat. No.: GC71230

Chemical Properties

Cas. No.	2254432-75-0		
Formula	$C_{21}H_{22}N_4O_2S$	M.Wt	394.49
Solubility	DMSO : 33.33 mg/mL (84.49 mM; ultrasonic and warming and heat to 80°C; Hygroscopic DMSO has a significant impact on the solubility of product, please use newly opened DMSO)	Storage	4°C, sealed storage, away from moisture
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			



Background

NLRP3-IN-17 is a potent, selective and orally active NLRP3 inflammasome inhibitor with an IC50 value of 7 nM. NLRP3-IN-17 significantly inhibits NLRP3 dependent IL-1β secretion in mice and can

be used for chronic inflammatory diseases research.

NLRP3-IN-17 (compound 15) (3 mg/kg; po) displays desired PK profile, the AUC, t and F% values are 4.2 µg.h/mL, 2.91 h, and 56%, respectively[1].
NLRP3-IN-17 (10 mg/kg; po; single dosage) significantly inhibit NLRP3 dependent IL-1β secretion in acute in vivo LPS+ATPchallenged model in female C57BL/6 mice, it decreases the IL-1β levels by 44%[1].

References:
[1]. Sameer Agarwal, et al. Discovery of N-Cyano-sulfoximineurea Derivatives as Potent and Orally Bioavailable NLRP3 Inflammasome Inhibitors. ACS Med Chem Lett. 2020 Feb 27;11(4):414-418.