

Catalog # 10-3672 NLRP3i

CAS# 16673-34-0 JC121

4-[2-(5-Chloro-2-methoxybenzamido)ethyl]phenylsulfonamide Lot # X109375

NLRP3 inflammasome inhibitor which likely acts via interfering with the formation of the NLRP3 inflammasome complex and which exhibits promising *in vivo* protective activities in mouse acute myocardial infarction models. It blocks ASC aggregation, blocks the release of IL-1β and the activation of caspase-1 in macrophages expressing constitutively active NLRP3 but does not directly inhibit caspase-1.1,2 Limits infarct size after myocardial ischemia-reperfusion as well as leukocyte infiltration in a peritonitis model in mice.2

- 1) Fulp et al. (2018), Structural Insights of Benzenesulfonamide Analogues as NLRP3 Inflammasome Inhibitors: Design, Synthesis, and Biological Characterization; J. Med. Chem., **61** 5412
- 2) Marchetti et al. (2014), A novel pharmacologic inhibitor of the NLRP3 inflammasome limits myocardial injury after ischemia-reperfusion in the mouse; J. Cardiovas. Pharmacol., **63** 316

PHYSICAL DATA

Molecular Weight: 368.84

Molecular Formula: C₁₆H₁₇CIN₂O₄S Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 45 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at room temperature for up to 3 years from the date of purchase.

Solutions in DMSO may be stored at -20°C for up to 3 months.

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