

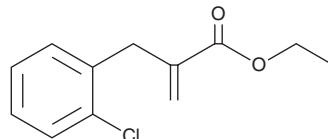
PRODUCT INFORMATION



INF39

Item No. 28476

CAS Registry No.: 866028-26-4
Formal Name: 2-chloro- α -methylene-
benzenepropanoic acid, ethyl ester
MF: $C_{12}H_{13}ClO_2$
FW: 224.7
Purity: $\geq 98\%$
Supplied as: An oil
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

INF39 is supplied as an oil. A stock solution may be made by dissolving the INF39 in the solvent of choice, which should be purged with an inert gas. INF39 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of INF39 in these solvents is approximately 30 mg/ml.

Description

INF39 is an irreversible inhibitor of the NLRP3 inflammasome.¹ INF39 (10 μ M) inhibits activation of caspase-1 and the release of IL-1 β and lactate dehydrogenase (LDH) induced by ATP (Item No. 14498) or nigericin (Item No. 11437) in LPS-primed bone marrow-derived macrophages (BMDMs). It reduces ATP-induced pyroptosis in LPS-primed THP-1 cells by 33.6% when used at a concentration of 10 μ M. INF39 (12.5, 25, and 50 mg/kg) prevents increases in IL-1 β protein levels induced by dinitrobenzene sulfonic acid (DNBS) in the colon in a rat model of colitis. It reduces the severity of pancreatic lesions and serum levels of IL-1 β , TNF- α , and IL-6 during caerulein- and LPS-induced pancreatitis in mice when administered at doses of 25 and 50 mg/kg.²

References

1. Cocco, M., Pellegrini, C., Martínez-Banaclocha, H., *et al.* Development of an acrylate derivative targeting the NLRP3 inflammasome for the treatment of inflammatory bowel disease. *J. Med. Chem.* **60**(9), 3656-3671 (2017).
2. Fu, Q., Zhai, Z., Wang, Y., *et al.* NLRP3 deficiency alleviates severe acute pancreatitis and pancreatitis-associated lung injury in a mouse model. *Biomed. Res. Int.* 1294951 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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