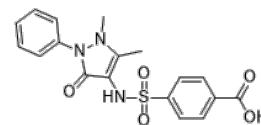


Product Name : GI-Y1
Cat. No. : PC-25137
CAS No. : 31816-70-3
Molecular Formula : C₁₈H₁₇N₃O₅S
Molecular Weight : 387.41
Target : Other Targets
Solubility : 10 mM in DMSO



CAS: 31816-70-3

Biological Activity

GSDMD inhibitor Y1 (GI-Y1) is a selective gasdermin D (GSDMD) inhibitor, binds to GSDMD with SPR KD of 7.69 μ M, shows cardioprotective effects.

GI-Y1 directly binds to GST-hGSDMD with a KD value of 16.61 μ M in BLI assays, inhibits the membrane oligomerization of GSDMD-N via the Arg7 residue

GI-Y1 significantly inhibited the cleavage of GSDMD, while GI-Y1 had no effect on the activation of Caspase-1, Caspase-11 and GSDME, indicating the selectivity of GI-Y1 toward GSDMD.

GI-Y1 (20 μ M) release of IL-1 β and IL-18 induced by LPS combined with nigericin (Nig) in PMA-differentiated THP-1 cells.

GI-Y1 (50 mg/kg/day) protects heart against myocardial I/R injury and cardiomyocyte pyroptosis.

GI-Y1 alleviates hypoxia/reoxygenation (H/R)—induced cardiomyocyte pyroptosis by targeting GSDMD.

References

Zhong L, et al. Basic Res Cardiol. 2023 Oct 2;118(1):40.

Shi S, et al. Eur J Pharmacol. 2025 Jul 25:178006.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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