

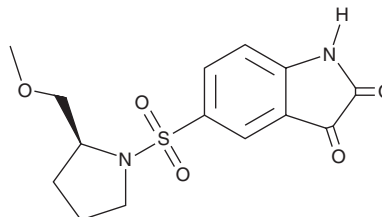
PRODUCT INFORMATION



MMPSI

Item No. 45465

CAS Registry No.: 220509-74-0
Formal Name: 5-[[[(2S)-2-(methoxymethyl)-1-pyrrolidinyl]sulfonyl]-1H-indole-2,3-dione
Synonym: Caspase-3/7 Inhibitor I
MF: C₁₄H₁₆N₂O₅S
FW: 324.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

MMPSI is supplied as a solid. A stock solution may be made by dissolving the MMPSI in the solvent of choice, which should be purged with an inert gas. MMPSI is soluble (≥10 mg/ml) in DMSO.

Description

MMPSI inhibits caspase-3 and caspase-7 in a cell-free assay (IC₅₀s = 0.085 and 1.3 μM, respectively).¹ It is selective for caspase-3 and caspase-7 over caspase-1, -6, and -8 in a cell-free assay (IC₅₀s = >15 μM). MMPSI reduces ischemia-reperfusion injury-induced apoptosis in H9c2 rat cardiomyocytes (IC₅₀ = 0.5 μM) and spontaneous apoptosis in adult rabbit cardiomyocyte isolates (IC₅₀ = 1.5 μM).² It reduces infarct size in an isolated rabbit heart model of ischemia-reperfusion injury when used at concentrations of 0.1, 1, and 10 μM.

References

1. Kopka, K., Faust, A., Keul, P., *et al.* 5-Pyrrolidinylsulfonyl isatins as a potential tool for the molecular imaging of caspases in apoptosis. *J. Med. Chem.* **49(23)**, 6704-6715 (2006).
2. Chapman, J.G., Magee, W.P., Stukenbrok, H.A., *et al.* A novel nonpeptidic caspase-3/7 inhibitor, (S)-(+)-5-[1-(2-methoxymethylpyrrolidinyl)sulfonyl]isatin reduces myocardial ischemic injury. *Eur. J. Pharmacol.* **456(1-3)**, 59-68 (2002).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM