

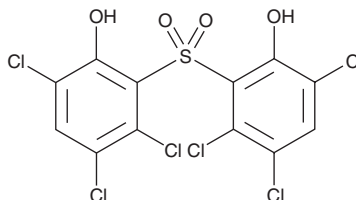
PRODUCT INFORMATION



p38 MAPK Inhibitor IV

Item No. 22219

CAS Registry No.: 1638-41-1
Formal Name: 3,4,6-trichloro-2-[(2,3,5-trichloro-6-hydroxyphenyl)sulfonyl]-phenol
Synonyms: p38 MAP Kinase Inhibitor IV, p38 Mitogen-activated Protein Kinase Inhibitor IV
MF: C₁₂H₄Cl₆O₄S
FW: 456.9
Purity: ≥98%
UV/Vis.: λ_{max}: 214, 319 nm
Supplied as: A crystalline 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

p38 MAPK inhibitor IV is supplied as a crystalline solid. A stock solution may be made by dissolving the p38 MAPK inhibitor IV in the solvent of choice, which should be purged with an inert gas. p38 MAPK inhibitor IV is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of p38 MAPK inhibitor IV in these solvents is approximately 2.5 and 2 mg/ml, respectively.

p38 MAPK inhibitor IV is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, p38 MAPK inhibitor IV should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. p38 MAPK inhibitor IV has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

p38 MAPK inhibitor IV is an ATP-competitive inhibitor of p38 MAP kinases with IC₅₀ values of 0.13, 0.55, 5.47, and 8.63 μM for p38α, p38β, p38γ, and p38δ, respectively, *in vitro*.¹ It also inhibits LPS-induced TNF-α and IL-1β cytokine production (IC₅₀s = 22 and 44 nM, respectively) in human peripheral blood mononuclear cells.

Reference

1. Liu, Y.C., Ko, C.C., Cheng, F.C., *et al.* Identification of a novel competitive inhibitor of p38α MAPK by a human PBMC screen. *Biochim. Biophys. Res. Commun.* **352**(3), 656-661 (2007).

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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