

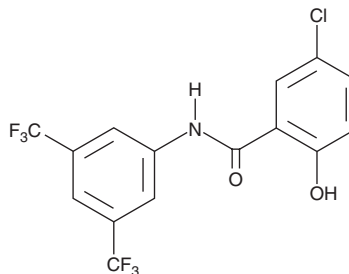
PRODUCT INFORMATION



IMD 0354

Item No. 17290

CAS Registry No.: 978-62-1
Formal Name: N-[3,5-bis(trifluoromethyl)phenyl]-5-chloro-2-hydroxy-benzamide
Synonym: IKK2 Inhibitor V
MF: C₁₅H₈ClF₆NO₂
FW: 383.7
Purity: ≥98%
UV/Vis.: λ_{max}: 212, 266, 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

IMD 0354 is supplied as a crystalline solid. A stock solution may be made by dissolving the IMD 0354 in the solvent of choice, which should be purged with an inert gas. IMD 0354 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of IMD 0354 in these solvents is approximately 20 mg/ml.

Description

IMD 0354 is an IKKβ (IKK2) inhibitor that blocks NF-κB phosphorylation (IC₅₀ = ~250 nM) and subsequent NF-κB p65 nuclear translocation.¹ It exhibits cardioprotective properties by decreasing expression of P-selectin and ICAM-1 in the vasculature and blocking cardiomyocyte IL-1β and MCP-1 production, resulting in suppressed neutrophil accumulation in a rat model of ischemia/reperfusion injury.¹ IMD 0354, suppresses the growth of human breast cancer cells by inducing cell cycle arrest and apoptosis.² It induces apoptosis of chronic lymphocytic leukemia cells at 1-10 μM by directly targeting the NF-κB pathway, decreasing expression of anti-apoptotic genes and increasing expression of proapoptotic genes.³

References

1. Onai, Y., Suzuki, J., Kakuta, T., *et al.* Inhibition of IκB phosphorylation in cardiomyocytes attenuates myocardial ischemia/reperfusion injury. *Cardiovasc. Res.* **63(1)**, 51-59 (2004).
2. Tanaka, A., Muto, S., Konno, M., *et al.* A new IκB kinase b inhibitor prevents human breast cancer progression through negative regulation of cell cycle transition. *Cancer Res.* **66(1)**, 419-426 (2006).
3. Kanduri, M., Tobin, G., Åleskog, A., *et al.* The novel NF-κB inhibitor IMD-0354 induces apoptosis in chronic lymphocytic leukemia. *Blood Cancer J.* **1(3)**, 1-6 (2011).

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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