

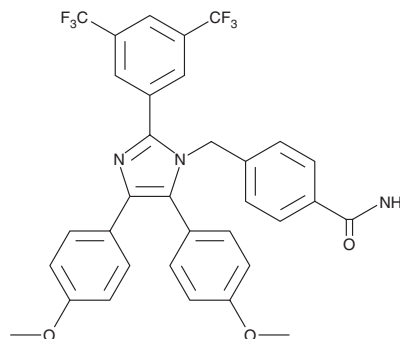
PRODUCT INFORMATION



Apoptozole

Item No. 17675

CAS Registry No.: 1054543-47-3
Formal Name: 4-[[2-[3,5-bis(trifluoromethyl)phenyl]-4,5-bis(4-methoxyphenyl)-1H-imidazol-1-yl]methyl]-benzamide
Synonym: Apoptosis Activator VII
MF: C₃₃H₂₅F₆N₃O₃
FW: 625.6
Purity: ≥98%
UV/Vis.: λ_{max}: 234 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

Apoptozole is supplied as a crystalline solid. A stock solution may be made by dissolving the apoptozole in the solvent of choice, which should be purged with an inert gas. Apoptozole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of apoptozole in ethanol is approximately 10 mg/ml and approximately 50 mg/ml in DMSO and DMF.

Description

Apoptozole is an inhibitor of heat shock protein 70 (Hsp70; 65% inhibition at 200 μM) that acts by blocking its ATPase activity.¹ It does not act on Hsp40, Hsp60, or Hsp90. Apoptozole dose-dependently induces apoptosis in cancer cells (IC₅₀ = 5-7 μM).¹ It prevents the association of Hsp70 with apoptotic protease-activating factor 1 and triggers caspase activation in HeLa cells.¹ Apoptozole (10 mg/kg, i.p.) prevents the growth of A549, RKO, and HeLa cell xenografts in mice without significant loss of body weight.²

References

1. Ko, S.-K., Kim, J., Na, D.C., *et al.* A small molecule inhibitor of ATPase activity of HSP70 induces apoptosis and has antitumor activities. *Chem. Biol.* **22(3)**, 391-403 (2015).
2. Ljung, B. Vascular selectivity of felodipine: Experimental pharmacology. *J. Cardiovasc. Pharmacol.* **15(Suppl 4)**, S11-S16 (1990).

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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