

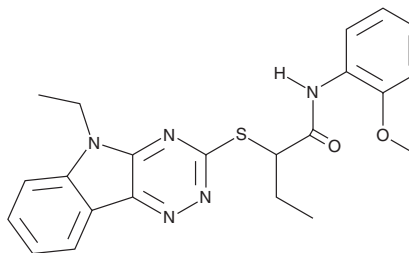
PRODUCT INFORMATION



SW044248

Item No. 23459

CAS Registry No.: 522650-83-5
Formal Name: 2-[(5-ethyl-5H-1,2,4-triazino[5,6-b]indol-3-yl)thio]-N-(2-methoxyphenyl)-butanamide
MF: C₂₂H₂₃N₅O₂S
FW: 421.5
Purity: ≥98%
UV/Vis.: λ_{max}: 202, 267, 344 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

SW044248 is supplied as a crystalline solid. A stock solution may be made by dissolving the SW044248 in the solvent of choice. SW044248 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of SW044248 in ethanol is approximately 1 mg/ml and approximately 5 mg/ml in DMSO and DMF.

Description

SW044248 is a DNA topoisomerase I inhibitor that exhibits selective cytotoxicity across a panel of 46 non-small cell lung cancer cell (NSCLC) lines (IC₅₀s = ~2 μM for HCC4017, H292, and H1819 cells versus >20 μM for the remaining cell lines).¹ It induces cleavage of poly(ADP-ribose) polymerase (PARP) and caspase-3 and blocks DNA replication, RNA transcription, and protein translation in HCC4017 susceptible-, but not HBEC30KT resistant-, cells in a dose-dependent manner. SW044248 inhibits the ability of recombinant topoisomerase 1 to relax supercoiled DNA in a dose-dependent manner and topoisomerase 1 knockdown rescues HCC4017 cells from SW044248 cytotoxicity. SW044248 is less cytotoxic against HCC4017 cells transfected with CDKN1, a protein overexpressed in SW044248-resistant NSCLC cells, indicating a role for CDKN1A in SW044248 resistance.

Reference

1. Zubovych, I.O., Sethi, A., Kulkarni, A., *et al.* A novel inhibitor of topoisomerase I is selectively toxic for a subset of non-small cell lung cancer cell lines. *Mol. Cancer Ther.* **15**(1), 23-36 (2016).

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.

WARRANTY AND LIMITATION OF REMEDY

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