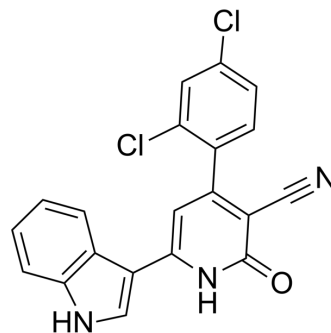


MAPK-IN-2

Cat. No.:	HY-155736
Molecular Formula:	C ₂₀ H ₁₁ Cl ₂ N ₃ O
Molecular Weight:	380.23
Target:	p38 MAPK; EGFR; Raf; CDK; c-Met/HGFR
Pathway:	MAPK/ERK Pathway; JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	MAPK-IN-2 (compound 3h) is a potent MAPK inhibitor with antineoplastic activity. MAPK-IN-2 inhibits cancer cell proliferation among several cancer cell lines, and suppresses MAPK pathway with potent efficacy (EGFR ^{WT} IC ₅₀ =281 nM, c-MET IC ₅₀ =205 nM, B-RAF ^{WT} IC ₅₀ =112 nM, and CDK4/6 IC ₅₀ =95 and 184 nM, respectively). MAPK-IN-2 even shows a remarkable potency against mutated EGFR and B-RAF (EGFR ^{T790M} IC ₅₀ =69 nM and B-RAF ^{V600E} IC ₅₀ =83 nM) ^[1] .
IC₅₀ & Target	IC ₅₀ : 281 nM (EGFR ^{WT}), 69 nM (EGFR ^{T790M}), 205 nM (c-MET), 112 nM (B-RAF ^{WT}), 83 nM (B-RAF ^{V600E}), 95 nM (CDK4), 184 nM (CDK6) ^[1]

REFERENCES

[1]. Saleh MM, et al. The mystery of titan hunter: Rationalized striking of the MAPK pathway via Newly synthesized 6-Indolylpyridone-3-Carbonitrile derivatives. Eur J Med Chem. 2023 Nov 5;259:115675.

Caution: Product has not been fully validated for medical applications. For research use only.

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