

FAK-IN-4

Chemical Properties

CAS No. :

Formula: C₂₀H₂₂N₄O

Molecular Weight: 334.41

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.

Biological Description

Description	FAK-IN-4 (Compound 7d) exhibits anticancer activities by inducing cell apoptosis and is a potential inhibitor of FAK [1].
Targets(IC50)	Apoptosis,FAK,Others
In vitro	FAK-IN-4 (Compound 7d), at concentrations ranging from 0-200 μ M over 72 hours, exhibits significant antiproliferative effects on triple-negative breast cancer (TNBC) cells [1]. At lower concentrations of 0-20 μ M for 24 hours, it effectively inhibits cell invasion and migration in MDA-MB-231 cells [1]. Additionally, within the same concentration range but over a longer period of 72 hours, FAK-IN-4 induces a dose-dependent dephosphorylation of FAK at Y925 and promotes apoptosis in MDA-MB-231 cells [1]. It also disrupts the formation of focal adhesions (FAs) and stress fibers (SFs) in these cells [1]. Through cell proliferation assays involving various cell lines (MDA-MB-231, MDA-MB-157, MDA-MB-453, and MCF10A) and concentrations up to 200 μ M for 72 hours, the growth of TNBC cells was inhibited with IC ₅₀ values ranging from 8.37 to 40.63 μ M [1]. Cell invasion assays at concentrations of 5, 10, and 20 μ M over 24 hours significantly reduced the invasion of MDA-MB-231 cells in a dose-dependent manner [1]. Western blot analysis confirmed the dose-dependent dephosphorylation of FAK at Y925 [1]. Apoptosis analysis, using the same cell line and concentration range over 72 hours, demonstrated an increase in apoptotic cells from 13.10% to 41.59%, also in a dose-dependent fashion [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9903 mL	14.9517 mL	29.9034 mL
5 mM	0.5981 mL	2.9903 mL	5.9807 mL
10 mM	0.299 mL	1.4952 mL	2.9903 mL
50 mM	0.0598 mL	0.299 mL	0.5981 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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