Product Datasheet

STAT3-IN-12

Catalog No. **BP-06926** · CAS **2980758-31-2** · Form **free base** · Physical state **solid** · Color **Off-white to light yellow** · Version **1.0** · Revision **2026-11-13**

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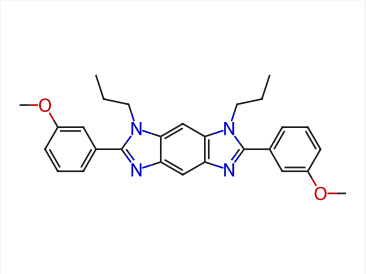
Target	Research area
STAT; Apoptosis	**Cancer**

Molecular formula	$C_{28}H_{30}N_4O_2$
Molecular weight	**454.5634**

STRUCTURE



DESCRIPTION

STAT3-IN-12 is a potent STAT3 signal inhibitor that can inhibit IL-6 induced JAK/STAT3 signalling pathway activation. STAT3-IN-12 inhibits cancer cell growth, migration, and induce cell apoptosis as well as cycle arrest. STAT3-IN-12 can be used in cancer-related research, such as hepatocellular carcinoma (HCC) and oesophageal carcinoma .

BIOLOGICAL ACTIVITY

In Vitro

STAT3-IN-12 (compound 24, 0-10 μM approximately, 72 h) inhibits cancer cell growth and migration in HepG2 and EC109 cells[1].

STAT3-IN-12 (0-20 μM, 16 h) binds to the STAT3 protein and inhibits IL-6-mediated STAT3 phosphorylation, also inhibts STAT3 nuclear localization and dimerization in EC109 and HepG2 cells[1].

STAT3-IN-12 (0-20 μM, 48 h) induces cell apoptosis as well as cycle arrest in HepG2 and EC109 cells[1].

In Vivo

STAT3-IN-12 (compound 24, intraperitoneal injection, 20, 40 mg/kg, daily for 24 days) displays obvious antitumor activity in a mouse HepG2 cell xenograft tumor model without no obvious toxicity[1].

SOLUBILITY

soluble in DMSO

REFERENCES

[1]. Yi-Chen Liu, et al. Benzobis(imidazole) derivatives as STAT3 signal inhibitors with antitumor activity.

Lot CoA and SDS are separate documents.