

Product Datasheet

IC 86621

Catalog No. **BP-02437** · CAS **404009-40-1** · Form **free base** · Physical state **solid** · Color **Light yellow to brown** · Version **1.0** · Revision **2026-09-11**

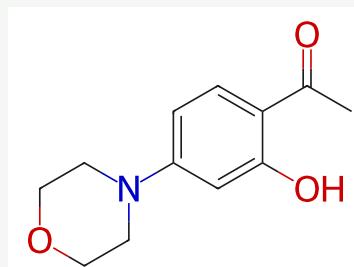
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Target DNA-PK; Apoptosis	Research area Inflammation/Immunology; Cancer
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Molecular formula **C₁₂H₁₅NO₃**

Molecular weight **221.2524**

STRUCTURE



DESCRIPTION

IC 86621 is a potent DNA-dependent protein kinase (DNA-PK) inhibitor, with an IC₅₀ of 120 nM. IC 86621 also acts as a selective and reversible ATP-competitive inhibitor. IC 86621 inhibits DNA-PK mediated cellular DNA double-strand break (DSB) repair (EC₅₀=68 μM). IC 86621 increases DSB-induced antitumor activity without cytotoxic effects. IC 86621 can protect rheumatoid arthritis (RA) T cells from apoptosis.

BIOLOGICAL ACTIVITY

In Vitro

IC 86621 exhibits high selectivity against other kinases such as PI3K, Cdk2, Src, PKA, PKC, Chk1, CK1, ATM, and FKBP12.

IC 86621 (0-100 nM, 24 h) protects RA (rheumatoid arthritis) T cells from apoptosis.

SOLUBILITY

Soluble in DMSO : 100 mg/mL

REFERENCES

[1].Chandra G, et al. Improved synthesis of a DNA-dependent protein kinase inhibitor IC86621. Arch Pharm Res. 2012 Mar;35(4):639-45.

[2].Shao L, et al. DNA-dependent protein kinase catalytic subunit mediates T-cell loss in rheumatoid arthritis. EMBO Mol Med. 2010 Oct;2(10):415-27.