

DNA-PK inhibitor NU7441 Small Molecule (Tool Compound)

Catalogue number: 151889

Sub-type: Inhibitor

Images:

Contributor

Inventor: Bernard Golding ; Laurent Rigoreau

Institute: Newcastle University

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: DNA-PK inhibitor NU7441 Small Molecule (Tool Compound)

Alternate name: DNA-dependent protein kinase (DNA-PK) inhibitor NU7441

Class:

Conjugate:

Description: NU7441 is a highly potent and selective DNA-PK inhibitor.

Purpose: Inhibitor

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity:

Selectivity: Also inhibits PI3K with IC₅₀ of 5 µM in cell-free assays.

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target:

Target alternate names:

Target background:

Molecular weight: 413.49 g/mol

Ic50: 14 nM

Applications

Application: NU7441 intraperitoneally administrated at dose of 10 mg/kg maintains for at least 4 hours shows nontoxic and increases etoposide-induced tumor growth delay 2-fold in mice bearing SW620 xenografts. NU7441 increases the persistence of γ -H2AX foci after ionizing radiation-induced or etoposide-induced DNA damage. NU7441 (0.5 μ M or 1 μ M) appreciably increases G2-M accumulation induced by ionizing radiation, etoposide, and doxorubicin in both SW620 and LoVo cells. NU7441 causes persistence of d...

Application notes:

Handling

Format:

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Dry Ice

Related tools

Related tools:

References

References: Marano et al. 2019. Int J Mol Sci. 20(21):. PMID: 31671722. ; Cooper et al. 2016. Nat Commun. 7:13661. PMID: 27892467. ; Jarid2 binds mono-ubiquitylated H2A lysine 119 to mediate crosstalk between Polycomb complexes PRC1 and PRC2. ; Mitson et al. 2011. Hum Mol Genet. 20(13):2603-10. PMID: 21505078. ; Fn significance of mutations in the Snf2 domain of ATRX. ; Lukashchuk et al. 2008. J Virol. 82(24):12543-54. PMID: 18922870. ; Human cytomegalovirus protein pp71 displaces the chromatin-associated factor ATRX from nuclear domain 10 at early stages of infection. ; McDowell et al. 1999. Proc Natl Acad Sci U S A. 96(24):13983-8. PMID: 10570185. ; Localization of a putative transcriptional regulator (ATRX) at pericentromeric heterochromatin and the short arms of acrocentric chromosomes.

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