Chk2 inhibitor CCT241533 Small Molecule (Tool Compound)

Catalogue number: 151833
Sub-type: Inhibitor
Images:

Contributor

Inventor: Michelle Garrett
Institute: The Institute of Cancer Research
Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Chk2 inhibitor CCT241533 Small Molecule (Tool Compound)

Alternate name:

Class:
Conjugate:
Description: The Chk2 inhibitor CCT241533 was shown to produce a mechanistic inhibition of CHK2 in HT29 human colon cancer cells as well as a radioprotective effect in mouse thymocytes. In normal cells, p53 is activated by CHK2 and other kinases in response to double-strand DNA damage resulting in G1 cell cycle arrest and apoptosis. Inhibition of CHK2 may provide an antitumor effect in cancer cells, and therefore a therapeutic approach.
Purpose: Inhibitor
Parental cell:
Organism:
Tissue:
Model:
Gender:
Isotype:
Reactivity:
Selectivity: Shows minimal cross-reactivity against a panel of kinases at 1 uM. 63 fold Selectivity over CHK-1
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:
Growth properties:

Production details:
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes: Synonym: CCT241533 CAS Number: 1262849-73-9

Target details

Target:

Target alternate names:

Target background:

Molecular weight: 442.48

Ic50: 3 nmol/L

Applications

Application: CCT241533 blocked CHK2 activity in human tumor cell lines in response to DNA damage, as shown by inhibition of CHK2 autophosphorylation at S516, band shift mobility changes, and HDMX degradation. CCT241533 did not potentiate the cytotoxicity of a selection of genotoxic agents in several cell lines. However, this compound significantly potentiates the cytotoxicity of two structurally distinct PARP inhibitors. Clear induction of the pS516 CHK2 signal was seen with a PARP inhibitor alone, and th...
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: Charles et al. 2015. J Med Chem. :. PMID: 26356364