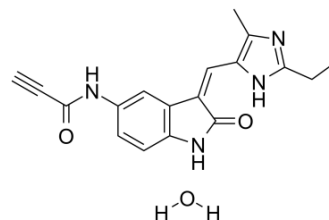


JH295 hydrate

Cat. No.:	HY-116423A
Molecular Formula:	C ₁₈ H ₁₈ N ₄ O ₃
Molecular Weight:	338.36
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	JH295 hydrate is a potent, irreversible and selective NIMA-related kinase 2 (Nek2) inhibitor with an IC₅₀ of 770 nM. JH295 hydrate inhibits cellular Nek2 via alkylation of Cys22. JH295 hydrate is inactive against the mitotic kinases, Cdk1, Aurora B or Plk1, and does not perturb bipolar spindle assembly or the spindle assembly checkpoint ^[1] .								
IC₅₀ & Target	IC ₅₀ : 770 nM (Nek2) ^[1]								
In Vitro	JH295 (Compound 16; 0.08-20 μM; 45 minutes; RPMI7951 cells) treatment inhibits WT Nek2 in cells with an IC ₅₀ of ~1.3 μM, whereas it has little effect on the C22V mutant ^[1] . Western Blot Analysis^[1]								
	<table border="1"> <tr> <td>Cell Line:</td> <td>RPMI7951 cells</td> </tr> <tr> <td>Concentration:</td> <td>0.08 μM, 0.25 μM, 0.74 μM, 2.2 μM, 6.6 μM, 20 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>45 minutes</td> </tr> <tr> <td>Result:</td> <td>Inhibited WT Nek2 in cells with an IC₅₀ of ~1.3 μM, whereas had little effect on the C22V mutant.</td> </tr> </table>	Cell Line:	RPMI7951 cells	Concentration:	0.08 μM, 0.25 μM, 0.74 μM, 2.2 μM, 6.6 μM, 20 μM	Incubation Time:	45 minutes	Result:	Inhibited WT Nek2 in cells with an IC ₅₀ of ~1.3 μM, whereas had little effect on the C22V mutant.
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REFERENCES

[1]. Jeffrey C Henise, et al. Irreversible Nek2 kinase inhibitors with cellular activity. *J Med Chem.* 2011 Jun 23;54(12):4133-46.

Caution: Product has not been fully validated for medical applications. For research use only.

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