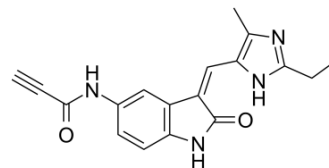


JH295

| | |
|--------------------|---|
| Cat. No.: | HY-116423 |
| CAS No.: | 1311143-71-1 |
| Molecular Formula: | C ₁₈ H ₁₆ N ₄ O ₂ |
| Molecular Weight: | 320.35 |
| Target: | Others |
| Pathway: | Others |
| Storage: | -20°C, stored under nitrogen * The compound is unstable in solutions, freshly prepared is recommended. |



SOLVENT & SOLUBILITY

In Vitro

DMSO : 55 mg/mL (171.69 mM; Need ultrasonic)

| Concentration | Mass | | | |
|---------------|-----------|------------|------------|--|
| | 1 mg | 5 mg | 10 mg | |
| 1 mM | 3.1216 mL | 15.6079 mL | 31.2159 mL | |
| 5 mM | 0.6243 mL | 3.1216 mL | 6.2432 mL | |
| 10 mM | 0.3122 mL | 1.5608 mL | 3.1216 mL | |

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

JH295 is a potent, irreversible and selective NIMA-related kinase 2 (Nek2) inhibitor with an IC₅₀ of 770 nM. JH295 inhibits cellular Nek2 via alkylation of Cys22. JH295 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

IC₅₀: 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 IC₅₀ of ~1.3 μM, whereas it has little effect on the C22V mutant^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis^[1]

| | |
|------------------|--|
| 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 IC50 of ~1.3 μ M, whereas had little effect on the C22V mutant. |
|---------|--|

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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