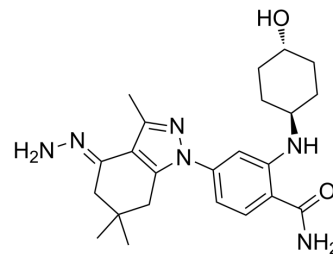


## JD-02

|                           |   |
|---------------------------|---|
| <b>Cat. No.:</b>          | HY-162365   |
| <b>Molecular Formula:</b> | C <sub>23</sub> H <sub>32</sub> N <sub>6</sub> O <sub>2</sub>                             |
| <b>Molecular Weight:</b>  | 424.54  |
| <b>Target:</b>            | HSP; Apoptosis; Autophagy   |
| <b>Pathway:</b>           | Cell Cycle/DNA Damage; Metabolic Enzyme/Protease; Apoptosis; Autophagy                    |
| <b>Storage:</b>           | Please store the product under the recommended conditions in the Certificate of Analysis. |



### BIOLOGICAL ACTIVITY

| Description                         | JD-02 is a novel Hsp90 inhibitor. JD-02 can induce autophagy and apoptosis. JD-02 increases the level of reactive oxygen species <sup>[1]</sup> .   |
|-------------------------------------|---|
| In Vitro                            | JD-02 (0–2 μM, 24, 48, and 72 h) inhibits growth and in HTC116 and SW620 cells <sup>[1]</sup> .<br>JD-02 (1 μM, 36 h) induces G0/G1 phase arrest in HTC116 and SW620 cells <sup>[1]</sup> .<br>JD-02 (1 μM, 48 h) induces cell apoptosis in HTC116 and SW620 cells <sup>[1]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only.<br>Cell Viability Assay <sup>[1]</sup> |
|                                     | Cell Line: HTC116 and SW620 cells   |
|                                     | Concentration: 0–2 μM   |
|                                     | Incubation Time: 24, 48, and 72 h   |
|                                     | Result: Inhibited cell growth.  |
|                                     | Apoptosis Analysis <sup>[1]</sup>   |
|                                     | Cell Line: HTC116 and SW620 cells   |
|                                     | Concentration: 1 μM   |
|                                     | Incubation Time: 48 h.  |
|                                     | Result: Induced cell apoptosis.   |
|                                     | Cell Cycle Analysis <sup>[1]</sup>  |
|                                     | Cell Line: HTC116 and SW620 cells   |
| Concentration: 1 μM                 |   |
| Incubation Time: 36 h               |   |
| Result: Induced G0/G1 phase arrest. |   |

## In Vivo

JD-02 (5, 10, and 20 mg/kg for i.p; 21 days) decreases tumor development in HCT116 cell xenograft mouse model<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

|                 |  |
|-----------------|--|
| Animal Model:   | HCT116 cell xenograft mouse model <sup>[1]</sup> |
| Dosage:         | 5, 10, and 20 mg/kg                              |
| Administration: | Intravenous injection for 21 days                |
| Result:         | decreased tumor development by 64.3%.            |

## REFERENCES

[1]. Lan N, et al. JD-02, a novel Hsp90 inhibitor, induces ROS/SRC axis-dependent cytoprotective autophagy in colorectal cancer cells. Mol Carcinog. Published online February 27, 2024.

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

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