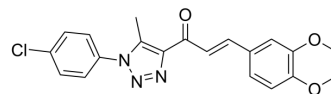


## Anticancer agent 56

<b>Cat. No.:</b>	HY-146444
<b>CAS No.:</b>	2241915-59-1
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>18</sub> ClN <sub>3</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	383.83
<b>Target:</b>	Apoptosis; Bcl-2 Family; Caspase; Reactive Oxygen Species
<b>Pathway:</b>	Apoptosis; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Anticancer agent 56 (compound 4d) is a potent anti-cancer agent with agent-likeness properties, possessing anticancer activity against several cancer cell lines (IC <sub>50</sub> <3 μM). Anticancer agent 56 induces cell cycle arrest at G2/M phase and triggers mitochondrial apoptosis pathway. Anticancer agent 56 acts by accumulation of ROS, up regulation of BAX, down regulation of Bcl-2 and activation of caspases 3, 7, 9 <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 0.64 ± 0.02 μM in Leukemia RPMI-8226, 0.96 ± 0.04 μM in Leukemia SR, 0.84 ± 0.07 μM in Leukemia K-562, 0.69 ± 0.01 μM in Melanoma M14, 0.24 ± 0.01 μM in Breast MCF7, 0.26 ± 0.01 μM in Colon HCT116, 2.95 ± 0.14 μM in Prostate PC3 <sup>[1]</sup>

### REFERENCES

[1]. Ashour HF, et al. 1,2,3-Triazole-Chalcone hybrids: Synthesis, in vitro cytotoxic activity and mechanistic investigation of apoptosis induction in multiple myeloma RPMI-8226. Eur J Med Chem. 2020;189:112062.

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

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