Inhibitors

Dithiodipropionic acid

Cat. No.: HY-W014395 CAS No.: 1119-62-6 Molecular Formula: $C_{6}H_{10}O_{4}S_{2}$ Molecular Weight: 210.26

Target: Reactive Oxygen Species; Apoptosis

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κΒ; Apoptosis

Storage: Powder 3 years

4°C 2 years In solvent -80°C 6 months -20°C 1 month

BIOLOGICAL ACTIVITY

Description	Dithiodipropionic acid can interact with <u>CPUL1</u> (HY-151802, a TrxR inhibitor) to form nanoaggregates (CPUL1-DA NAs). CPUL1-DA NAs generates more abundant ROS to induce cell apoptosis than that of free CPUL1, and improves antitumor efficacy against HUH7 cancer cells ^[1] .
In Vitro	CPUL1-DA NAs (molar ratio was 1:2) inhibits HUH7 hepatoma cell viability with an IC $_{50}$ value of 4.3 μ M, and has weak cytotoxicity against normal L02 cells ^[1] . CPUL1-DA NAs (2.5-10 μ M, 6 h) can be more effectively enriched in HUH7 cells mitochondria and displays faster cellular uptake ability to deliver CPUL1 into cells than that of free CPUL1 ^[1] . CPUL1-DA NAs (2.5-10 μ M, 12 h) results in the accumulation of superoxides and mitochondrial membrane damage in HUH7 cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Jing Liu, et al. Nanoaggregates of Disulfide-Decorated TrxR Inhibitor Promote Cellular Uptake, Selective Targeting, and Antitumor Efficacy. Langmuir.

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

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