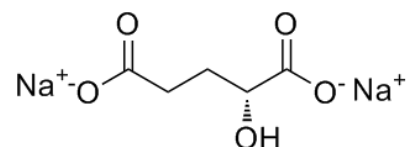


Product Name : D-alpha-Hydroxyglutaric acid disodium
Cat. No. : PC-42195
CAS No. : 103404-90-6
Molecular Formula : C₅H₆Na₂O₅
Molecular Weight : 192.08
Target : Histone Demethylase
Solubility : H₂O: ≥ 32 mg/mL



Biological Activity

D-alpha-Hydroxyglutaric acid disodium (D-2-HG, D-2-hydroxyglutarate) is a competitive inhibitor of multiple **α-KG-dependent dioxygenases**, including histone demethylases and the TET family of 5-methylcytosine (5mC) hydroxylases. D-2-HG partially and completely inhibits CeKDM7A demethylase at 50 mM and 100 mM, respectively. D-2-HG competes with α-KG and inhibits KDM5B/JARID1B/PLU-1 with K_i of 10.87 mM. D-2-HG binds and inhibits ATP synthase and inhibits mTOR signaling in IDH1 mutant cells.

References

Xu W, et al. **Cancer Cell**. 2011 Jan 18;19(1):17-30.
Fu X, et al. **Cell Metab**. 2015 Sep 1;22(3):508-15.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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