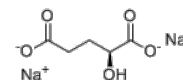


**Product Name** : L- $\alpha$ -Hydroxyglutaric acid disodium  
**Cat. No.** : PC-62978  
**CAS No.** : 63512-50-5  
**Molecular Formula** : C<sub>5</sub>H<sub>6</sub>Na<sub>2</sub>O<sub>5</sub>  
**Molecular Weight** : 192.08  
**Target** : Histone Demethylase  
**Solubility** : 10 mM in DMSO



## Biological Activity

L- $\alpha$ -Hydroxyglutaric acid disodium (L-2-Hydroxyglutarate, L-2-HG) competitive inhibitor of multiple  **$\alpha$ -KG-dependent dioxygenases**, including histone demethylases and the TET family of 5-methylcytosine (5mC) hydroxylases.

L- $\alpha$ -Hydroxyglutaric acid disodium competes with  $\alpha$ -KG and inhibits KDM5B/JARID1B/PLU-1 with K<sub>i</sub> of 0.628 mM.

L- $\alpha$ -Hydroxyglutaric acid disodium binds and inhibits **ATP synthase** and inhibit 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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