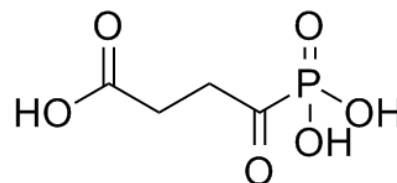


**Product Name** : Succinyl phosphonate  
**Cat. No.** : PC-43150  
**CAS No.** : 26647-82-5  
**Molecular Formula** : C<sub>4</sub>H<sub>7</sub>O<sub>6</sub>P  
**Molecular Weight** : 182.0685  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



### Biological Activity

Succinyl phosphonate is an  $\alpha$ -Ketoglutarate phosphoanalogue,  $\alpha$ -ketoglutarate dehydrogenase inhibitor, effectively inhibits  $\alpha$ -ketoglutarate oxidative decarboxylation; inhibits both muscle and bacterial  $\alpha$ -ketoglutarate dehydrogenase complexes (KGDHC), as well as muscle  $\alpha$ -ketoglutarate dehydrogenase; inhibits the glutamate-induced ROS production in glutamate-stimulated hippocampal neurons in situ; impairs viability of cancer cells in a cell-specific metabolism-dependent manner.

### References

- Biryukov AI, et al. FEBS Lett. 1996 Mar 11;382(1-2):167-70.  
Bunik VI, et al. Biochemistry. 2005 Aug 9;44(31):10552-61.  
Zündorf G, et al. Neuroscience. 2009 Jan 23;158(2):610-6.  
Bunik VI, et al. Oncotarget. 2016 May 3;7(18):26400-21.

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

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