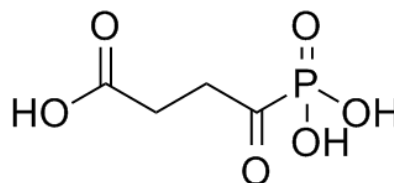


Product Name : Succinyl phosphonate
Cat. No. : PC-43150
CAS No. : 26647-82-5
Molecular Formula : C₄H₇O₆P
Molecular Weight : 182.0685
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

Succinyl phosphonate is an α -Ketoglutarate phosphoanalogue, **α -ketoglutarate dehydrogenase** (alpha-KGDHC) inhibitor, effectively inhibits α -ketoglutarate oxidative decarboxylation.

Succinyl phosphonate inhibits both muscle and bacterial α -ketoglutarate dehydrogenase complexes (KGDHC), as well as muscle α -ketoglutarate dehydrogenase.

Succinyl phosphonate 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

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Bunik VI, et al. Biochemistry. 2005 Aug 9;44(31):10552-61.

Zündorf G, et al. Neuroscience. 2009 Jan 23;158(2):610-6.

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

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