

## 2-Deoxy-D-Glucose

货号: D4861

储存条件: 粉末-20°C 可保存 3 年; 液体-80°C 可保存 12 月。

### 产品描述

2-Deoxy-D-glucose (2DG), a glucose analog, targets glucose metabolism to deplete cancer cells of energy. In addition, 2DG increases oxidative stress, inhibits N-linked glycosylation, and induces autophagy. It can efficiently slow cell growth and potently facilitate apoptosis in specific cancer cells. Acting as a d-glucose mimic, 2-DG inhibits glycolysis due to formation and intracellular accumulation of 2-deoxy-d-glucose-6-phosphate (2-DG6P), inhibiting the function of hexokinase and glucose-6-phosphate isomerase, and inducing cell death. The combination of 2-DG and HCPT (hydroxycamptothecin) can synergistically induce the apoptosis of breast cancer cells, which may be caused by inhibiting the energy generation of tumor cells, inhibiting the phosphorylation of Akt protein and enhancing the activity of caspase-3 protein.

### 产品信息

CAS 号	154-17-6	
分子式	C <sub>6</sub> H <sub>12</sub> O <sub>5</sub>	
分子量	164.16	
溶解度	DMSO	31.0 mg/mL (188.8 mM)
	Water	31.0 mg/mL (188.8 mM)
	Ethanol	5.0 mg/mL (30.5 mM)

