

# 2-Deoxy-D-glucose, Non-metabolizable glucose analog

Catalog	Unit
TBI2171 - 1G	1 g
TBI2171 - 5G	5 g

#### **Product Details**

Formal Name: 2-Deoxy-D-arabino-hexose

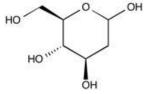
Alternate Names: 2-DG Molecular Formula: C<sub>6</sub>H<sub>12</sub>O<sub>5</sub> Formula Weight: 164.2 CAS Number: 154-17-6

**Purity:** ≥97%

Formulation: Powder.

**Solubility:** Soluble in Water (up to 50 mg/ml), or in DMSO (up to 15 mg/ml)

Storage:  $-20^{\circ}$ C Stability:  $\geq 2$  years.



#### **Applications**

Non-metabolizable glucose analog

# **Functions**

Non-metabolizable glucose analog. Inhibits protein N-glycosylation and glycolysis. Activates autophagy via ER stress. Enhances antitumor effects of chemotherapeutic agents by increasing ER stress and decreasing ATP stores however effects on cancer cells are distinct and cell line specific. Induces unfolded protein response (UPR). A calorie restriction mimetic.

# **Application Procedures**

First dissolved in DMSO (up to 15 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at  $-20^{\circ}$ C for up to 2 months.

# **Relative Products**

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabline
TBI2058	Aphidicolin, DNA polymerase Inhibitor

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