

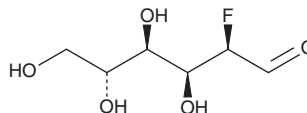
# PRODUCT INFORMATION



## 2-deoxy-2-fluoro-D-Glucose

Item No. 33187

CAS Registry No.: 29702-43-0  
Synonyms: FGD, 2-FG, Fluorodeoxyglucose,  
2-fluoro-2-deoxy-D-Glucose  
MF:  $C_6H_{11}FO_5$   
FW: 182.1  
Purity:  $\geq 95\%$   
Supplied as: A crystalline solid  
Storage:  $-20^\circ\text{C}$   
Stability:  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

2-deoxy-2-fluoro-D-Glucose (2-FG) is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-FG in the solvent of choice, which should be purged with an inert gas. 2-FG is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 2-FG in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 2-FG can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 2-FG in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

2-FG is a derivative of glucose with anticancer activity.<sup>1</sup> It inhibits the growth of 143B osteosarcoma cells grown under normoxic and hypoxic conditions when used at concentrations of 6 and 24 mM.

### Reference

1. Lampidis, T.J., Kurtoglu, M., Maher, J.C., *et al.* Efficacy of 2-halogen substituted D-glucose analogs in blocking glycolysis and killing "hypoxic tumor cells". *Cancer Chemother. Pharmacol.* **58(6)**, 725-734 (2006).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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