

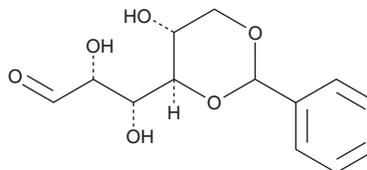
# PRODUCT INFORMATION



## 4,6-O-Benzylidene-D-glucose

Item No. 18894

**CAS Registry No.:** 30688-66-5  
**Formal Name:** 4,6-O-(phenylmethylene)-D-glucose  
**Synonym:** 4,6-O-Benzylidene-D-glucopyranose  
**MF:** C<sub>13</sub>H<sub>16</sub>O<sub>6</sub>  
**FW:** 268.3  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

4,6-O-Benzylidene-D-glucose is supplied as a crystalline solid. A stock solution may be made by dissolving the 4,6-O-benzylidene-D-glucose in the solvent of choice, which should be purged with an inert gas. 4,6-O-Benzylidene-D-glucose is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 4,6-O-benzylidene-D-glucose in ethanol and DMF is approximately 25 mg/ml, and approximately 14 mg/ml in DMSO.

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 4,6-O-benzylidene-D-glucose can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 4,6-O-benzylidene-D-glucose in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

4,6-O-Benzylidene-D-glucose is a useful intermediate for the synthesis of carbohydrates.<sup>1</sup>

### Reference

1. Adibekian, A., Timmer, M.S.M., Stallforth, P., *et al.* Stereocontrolled synthesis of fully functionalized D-glucosamine monosaccharides *via* a domino nitro-Michael/Henry reaction. *Chem. Commun.* **30**, 3549-3551 (2008).

#### 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.

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