

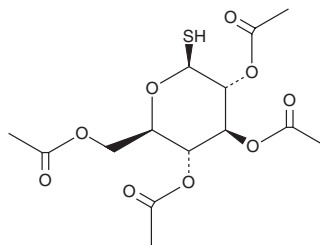
# PRODUCT INFORMATION



## 1-thio-β-D-Glucose Tetraacetate

Item No. 30446

**CAS Registry No.:** 19879-84-6  
**Formal Name:** 1-thio-β-D-glucopyranose,  
2,3,4,6-tetraacetate  
**MF:** C<sub>14</sub>H<sub>20</sub>O<sub>9</sub>S  
**FW:** 364.4  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

1-thio-β-D-Glucose tetraacetate is supplied as a solid. A stock solution may be made by dissolving the 1-thio-β-D-glucose tetraacetate in the solvent of choice, which should be purged with an inert gas. 1-thio-β-D-Glucose tetraacetate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 1-thio-β-D-glucose tetraacetate in ethanol is approximately 0.5 mg/ml and approximately 10 mg/ml in DMSO and DMF.

1-thio-β-D-Glucose tetraacetate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 1-thio-β-D-glucose tetraacetate should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 1-thio-β-D-Glucose tetraacetate has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

1-thio-β-D-Glucose tetraacetate is a building block.<sup>1,2</sup> It has been used in the synthesis of aromatic glucosinolates with anti-inflammatory activity, as well as glucosylated poly(pentafluorostyrene) derivatives for coating magnetic iron oxide nanoparticles.

### References

1. Vo, Q.V., Trenerry, C., Rochfort, S., *et al.* Synthesis and anti-inflammatory activity of aromatic glucosinolates. *Bioorg. Med. Chem.* **21(19)**, 5945-5954 (2013).
2. Babiuch, K., Wyrwa, R., Wagner, K., *et al.* Functionalized, biocompatible coating for superparamagnetic nanoparticles by controlled polymerization of a thioglycosidic monomer. *Biomacromolecules* **12(3)**, 681-691 (2011).

#### 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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