

# PRODUCT INFORMATION



## $\beta$ -D-Ribofuranose 1,2,3,5-tetraacetate

Item No. 30408

**CAS Registry No.:** 13035-61-5  
**Formal Name:** 1,2,3,5-tetraacetate  $\beta$ -D-ribofuranose  
**Synonyms:** NSC 18738,  
1,2,3,5-tetra-O-acetyl- $\beta$ -D-Ribofuranose,  
1',2',3',5'-O-tetraacetyl- $\beta$ -D-Ribofuranose

**MF:** C<sub>13</sub>H<sub>18</sub>O<sub>9</sub>

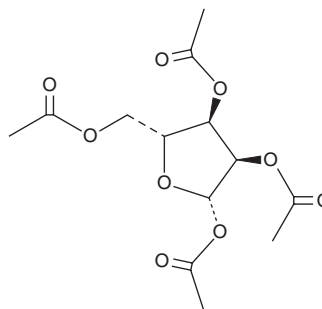
**FW:** 318.3

**Purity:**  $\geq$ 98%

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:**  $\geq$ 4 years



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

### Laboratory Procedures

$\beta$ -D-Ribofuranose 1,2,3,5-tetraacetate is supplied as a crystalline solid. A stock solution may be made by dissolving the  $\beta$ -D-ribofuranose 1,2,3,5-tetraacetate in the solvent of choice, which should be purged with an inert gas.  $\beta$ -D-Ribofuranose 1,2,3,5-tetraacetate is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of  $\beta$ -D-ribofuranose 1,2,3,5-tetraacetate in these solvents is approximately 10 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  $\beta$ -D-ribofuranose 1,2,3,5-tetraacetate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of  $\beta$ -D-ribofuranose 1,2,3,5-tetraacetate in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

$\beta$ -D-Ribofuranose 1,2,3,4-tetraacetate is a precursor in the synthesis of nucleosides with antiproliferative activity against cancer cells.<sup>1,2</sup>

### References

1. Furukawa, Y. and Honjo, M. A novel method for the synthesis of purine nucleosides using Friedel-Crafts catalysts. *Chem. Pharm. Bull. (Tokyo)* **16(6)**, 1076-80 (1968).
2. Wicke, L., Engels, J.W., Gambari, R., et al. Synthesis and antiproliferative activity of quinolone nucleosides against the human myelogenous leukemia k-562 cell line. *Arch. Pharm. (Weinheim)* **346(10)**, 757-765 (2013).

#### 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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