

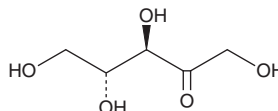
# PRODUCT INFORMATION



## D-Ribulose

Item No. 18893

**CAS Registry No.:** 488-84-6  
**Formal Name:** D-erythro-2-pentulose  
**Synonym:** D-Adonose  
**MF:** C<sub>5</sub>H<sub>10</sub>O<sub>5</sub>  
**FW:** 150.1  
**Purity:** ≥95%  
**Supplied as:** A solution in water  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Description

Ribulose is a ketopentose, a monosaccharide containing five carbon atoms and a ketone functional group. It is synthesized in the pentose phosphate pathway and plays a role in the formation of various bioactive compounds. It is a structural isomer of ribose and exists as two enantiomers, D-ribulose and L-ribulose.<sup>1</sup> A double phosphate ester of D-ribulose, ribulose-1,5-bisphosphate combines with carbon dioxide at the beginning of photosynthesis.<sup>2</sup>

### References

1. Nagy, G. and Pohl, N.L.B. Monosaccharide identification as a first step toward *de novo* carbohydrate sequencing: Mass spectrometry strategy for the identification and differentiation of diastereomeric and enantiomeric pentose isomers. *Anal. Chem.* **87(8)**, 4566-4571 (2015).
2. Wolosiuk, R.A., Ballicora, M.A., and Hagelin, K. The reductive pentose phosphate cycle for photosynthetic CO<sub>2</sub> assimilation: Enzyme modulation. *FEBS J.* **7**, 622-637 (1993).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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