

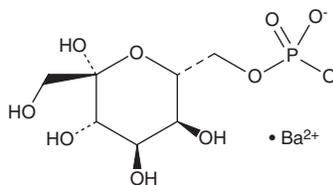
PRODUCT INFORMATION



D-Sedoheptulose-7-phosphate (barium salt)

Item No. 21344

CAS Registry No.: 17187-72-3
Formal Name: 7-(dihydrogen phosphate), sedoheptulose, monobarium salt
MF: $C_7H_{13}O_{10}P \cdot Ba$
FW: 425.5
Purity: $\geq 95\%$
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

D-Sedoheptulose-7-phosphate (barium salt) is supplied as a crystalline solid. Aqueous solutions of D-sedoheptulose-7-phosphate (barium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of D-sedoheptulose-7-phosphate (barium salt) in PBS (pH 7.2) is approximately 50 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

D-Sedoheptulose-7-phosphate is an intermediate in the pentose phosphate pathway.^{1,2} In this pathway, transaldolase catalyzes the transfer of a three carbon dihydroxyacetone moiety from D-sedoheptulose-7-phosphate to glyceraldehyde-3-phosphate to generate D-fructose-6-phosphate. D-Sedoheptulose-7-phosphate is also an intermediate in carbon fixation in photosynthetic organisms, as well as in the biosynthesis of lipopolysaccharide, amino acids, secondary metabolites, and antibiotics.³

References

1. Guma, K.A. and McLean, P. The pentose phosphate pathway of glucose metabolism: Enzyme profiles and transient and steady-state content of intermediates of alternative pathways of glucose metabolism in Krebs ascites cells. *Biochem. J.* **115(5)**, 1009-1029 (1969).
2. Patra, K.C. and Hay, N. The pentose phosphate pathway and cancer. *Trends Biochem. Sci.* **39(8)**, 347-354 (2014).
3. Wolosiuk, R.A., Ballicora, M.A., and Hagelin, K. The reductive pentose phosphate cycle for photosynthetic CO_2 assimilation: Enzyme modulation. *FASEB J.* **7(8)**, 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.

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