

Phosphoserine Phosphatase from Human, Recombinant

Cat. No. NATE-0911

Lot. No. (See product label)

Introduction

Description

Human Phosphoserine phosphatase (hPSP) is an important enzyme in the phosphorylated pathway of serine biosynthesis, which contributes a major portion of the endogenous L-serine. Similar to known L-3-phosphoserine phosphatases, it catalyzes the Mg^{2+} -dependent hydrolysis of L-phosphoserine and an exchange reaction between L-serine and L-phosphoserine. Recently, its complex structures reveal that the open-closed environmental change of the active site, generated-helical bundle domain, is important to substrate by local rearrangement of the recognition and hydrolysis.

Synonyms

Phosphoserine phosphatase; EC 3.1.3.3; PSP; O-phosphoserine phosphohydrolase; PSPase; L-3-phosphoserine phosphatase; PSPH

Product Information

Species

Human

Source

E. coli

Appearance

Sterile filtered colorless solution.

EC Number

EC 3.1.3.3

CAS No.

9025-73-4

Molecular Weight

25 kDa

Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Buffer

The protein contains 20mM Hepes pH 7.5, 1mM DTT & 100mM KCl2.

Storage and Shipping Information

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.