

Product: Phosphoserine Phosphatase (PSP), human
Catalog #: 01-2259
Amount: 50 µg

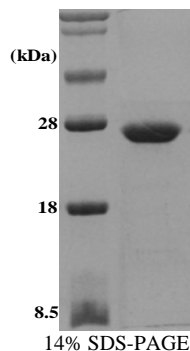
SOURCE:
DESCRIPTION:

Recombinant, E. coli

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 Mg²⁺-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 by local rearrangement of the α -helical bundle domain, is important to substrate recognition and hydrolysis.

AA Sequence:

MVSHSELRKL FYSADAVCFD VDSTVIREEG IDELAKICGV EDAVSEMTRR
AMGGAVPFKA ALTERLALIQ PSREQVORLI AEQPPHLTPG IRELVSR LQE
RNVQVFLISG GFRSIVEHVA SKLNIPATNV FANRLKFYFN GEYAGFDETQ
PTAESGGK GK VIKLLKEKFH FKKIIMIGDG ATDMEACPPA DAFIGFGGNV
IRQQVKDNAK WYITDFVELL GELEE



PURITY: Greater than 95% determined by SDS-PAGE
MOLECULAR WEIGHT: 25 kDa (225 amino acids)
PRESENTATION: Purified, in 20 mM Hepes, pH 7.5, 1 mM DTT, 100 mM KCl₂
STORAGE/STABILITY: -20°C (aliquot), Avoid repeated freeze and thaw cycles.

Reference:

Moro-Furlani, AM., *et al.* (1980) *Ann. Hum. Genet.* **43**, 323-333
Collet JF., *et al.* (1997) *FEBS Lett.* **408**, 281-284
Kim HY, *et al.* (2002) *J Biol Chem.* **277**, 46651-8

This product is sold for laboratory research use or further manufacturing only and should not be used for human therapeutic or diagnostic applications. The information presented is believed to be accurate; however, said information and products are offered without warranty or guarantee since the ultimate conditions of use and the variability of the materials treated are beyond our control. Nothing disclosed herein is to be construed as a recommendation to use our products in violation of any patents. Under no circumstances shall ARP American Research Products, Inc. be liable for damages, whether consequential, compensatory, incidental or special, strict liability or negligence, breach of warranty or any other theory arising out of the use of the products available from ARP American Research Products, Inc. Nothing contained herein warrants that the use of the products will not infringe on the claims of any patents covering the product itself or the use thereof in combination with other products or in the operation of any process.