



Recombinant Protein Technical Manual

Recombinant Human PSPH Protein

RPES4876

Product Data:

Product SKU: RPES4876

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: P78330

Protein Information:

Molecular Mass: 25 kDa

AP Molecular Mass: 28 kDa

Tag:

Bio-activity:

Purity: > 84 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.5

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Phosphoserine Phosphatase; PSP; PSPase; L-3-Phosphoserine Phosphatase; O-Phosphoserine Phosphohydrolase; PSPH

Immunogen Information:

Sequence: Met 1-Glu 225

Background:

Phosphoserine phosphatase (PSPH) belongs to a subfamily of the phosphotransferases. PSPH is the rate-limiting enzyme in L-serine biosynthesis. It has previously been found that Phosphoserine phosphatase (PSPH) plays a role in epidermal homeostasis. Phosphoserine phosphatase (PSP) catalyzes the hydrolysis of phosphoserine to serine. Phosphoserine phosphatase (PSPH) expression has been examined in human-mouse somatic cell hybrids retaining different combination of human chromosomes. Phosphoserine phosphatase (PSPH) is expressed throughout the proliferative layer of the epidermis and hair follicles in rodent and human skin and is highly induced in SCC. In keratinocytes, Phosphoserine phosphatase (PSPH) is a cytoplasmic protein that primarily localizes to endosomes and is present primarily as a homodimer. Knock down of Phosphoserine phosphatase (PSPH) dramatically diminished SCC cell proliferation and cyclin D1 levels in the presence of exogenous of L-serine production suggesting a non-canonical role for Phosphoserine phosphatase (PSPH) in epithelial carcinogenesis. Phosphoserine phosphatase (PSPH) is highly induced in proliferative normal keratinocytes and in skin tumors. Phosphoserine phosphatase (PSPH) appears to be critical for the proliferation of SCC cells; however, this phenomenon may not involve the phosphoserine metabolic pathway.