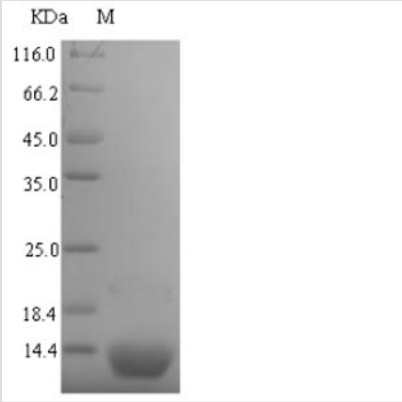
Recombinant Bacillus subtilis Phosphocarrier protein HPr (ptsH)

Product Code	CSB-EP362538BRJ
Relevance	General (non sugar-specific) component of the phosphoenolpyruvate-dependent sugar phosphotransferase system (sugar PTS). This major carbohydrate active-transport system catalyzes the phosphorylation of incoming sugar substrates concomitantly with their translocation across the cell membrane. The phosphoryl group from phosphoenolpyruvate (PEP) is transferred to the phosphoryl carrier protein HPr by enzyme I. Phospho-HPr then transfers it to the permease (enzymes II/III). P-Ser-HPr interacts with the catabolite control protein A (CcpA), forming a complex that binds to DNA at the catabolite response elements cre, operator sites preceding a large number of catabolite-regulated genes. Thus, P-Ser-HPr is a corepressor in carbon catabolite repression (CCR), a mechanism that allows bacteria to coordinate and optimize the utilization of available carbon sources. P-Ser-HPr also plays a role in inducer exclusion, in which it probably interacts with several non-PTS permeases and inhibits their transport activity.
Abbreviation	Recombinant Bacillus subtilis ptsH protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P08877
Alias	Histidine-containing protein
Product Type	Recombinant Protein
Immunogen Species	Bacillus subtilis (strain 168)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AQKTFKVTADSGIHARPATVLVQTASKYDADVNLEYNGKTVNLKSIMGVMSLGI AKGAEITISASGADENDALNALEETMKSEGLGE
Research Area	Others
Source	E.coli
Target Names	ptsH
Expression Region	2-88aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	25.1kDa
Protein Length	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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