PpsA Protein, E.coli (His-SUMO)

Cat. No.:	HY-P71458
Synonyms:	ppsA; pps; b1702; JW1692Phosphoenolpyruvate synthase; PEP synthase; EC 2.7.9.2; Pyruvate; water dikinase
Species:	E.coli
Source:	E. coli
Accession:	P23538 (2S-792K)
Gene ID:	946209
Molecular Weight:	Approximately 103.3 kDa

PROPERTIES

AA Sequence

S N N G S S P L V L W Y N Q L G M N D V D R V G G K N A S L G E M I T N L S G M
G V S V P N G F A T T A D A F N Q F L D Q S G V N Q R I Y E L L D K T D I D D V
T Q L A K A G A Q I R Q W I I D T P F Q P E L E N A I R E A Y A Q L S A D D E N
A S F A V R S S A T A E D M P D A S F A G Q Q E T F L N V Q G F D A V L V A V K
H V F A S L F N D R A I S Y R V H Q G Y D H R G V A L S A G V Q R M V R S D L A
S S G V M F S I D T E S G F D Q V V F I T S A W G L G E M V V Q G A V N P D E F
Y V H K P T L A A N R P A I V R R T M G S K K I R M V Y A P T Q E H G K Q V K I
E D V P Q E Q R D I F S L T N E E V Q E L A K Q A V Q I E K H Y G R P M D I E W
A K D G H T G K L F I V Q A R P E T V R S R G Q V M E R Y T L H S Q G K I I A E
G R A I G H R I G A G P V K V I H D I S E M N R I E P G D V L V T D M T D P D W
E P I M K K A S A I V T N R G G R T C H A A I I A R E L G I P A V V G C G D A T
E R M K D G E N V T V S C A E G D T G Y V Y A E L L E F S V K S S S V E T M P D
L P L K V M M N V G N P D R A F D F A C L P N E G V G L A R L E F I I N R M I G
V H P R A L L E F D D Q E P Q L Q N E I R E M M K G F D S P R E F Y V G R L T E
G I A T L G A A F Y P K R V I V R L S D F K S N E Y A N L V G G E R Y E P D E E
N P M L G F R G A G R Y V S D S F R D C F A L E C E A V K R V R N D M G L T N V
E I M I P F V R T V D Q A K A V V E E L A R Q G L K R G E N G L K I I M M C E I
P S N A L L A E Q F L E Y F D G F S I G S N D M T Q L A L G L D R D S G V V S E
L F D E R N D A V K A L L S M A I R A A K K Q G K Y V G I C G Q G P S D H E D F
A A W L M E E G I D S L S L N P D T V V Q T W L S L A E L K K

Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.

Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The PpsA protein is an enzyme that plays a crucial role in glycolysis and gluconeogenesis by catalyzing the phosphorylation of pyruvate to phosphoenolpyruvate. This enzymatic activity represents a pivotal step in the interconversion of metabolic intermediates, facilitating the entry of pyruvate into gluconeogenic pathways or its progression through glycolysis. The phosphorylation of pyruvate by PpsA is a reversible reaction and contributes to the regulation of the overall flux of carbon through these metabolic pathways. This enzyme is essential for maintaining cellular energy homeostasis and is integral to the fine-tuning of metabolic processes in response to the cell's energetic needs. Understanding the functions of PpsA provides valuable insights into the dynamic regulation of central carbon metabolism.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA