

## PTS Protein, Human (His)

<b>Cat. No.:</b>	HY-P73684
<b>Synonyms:</b>	6-pyruvoyl tetrahydrobiopterin synthase; PTP synthase; PTPS; PTS
<b>Species:</b>	Human
<b>Source:</b>	E. coli
<b>Accession:</b>	Q03393 (M1-E145)
<b>Gene ID:</b>	5805
<b>Molecular Weight:</b>	Approximately 17 kDa

### PROPERTIES

<b>AA Sequence</b>	<p>M S T E G G G R R C</p> <p>Q                                    A Q V S R R I S F S                    A S H R L Y S K F L                    S D E E N L K L F G</p> <p>K C N N P N G H G H                N Y K V V V T V H G                    E I D P A T G M V M                    N L A D L K K Y M E</p> <p>E A I M Q P L D H K                N L D M D V P Y F A                    D V V S T T E N V A                    V Y I W D N L Q K V</p> <p>L P V G V L Y K V K                V Y E T D N N I V V                    Y K G E</p>
<b>Appearance</b>	Lyophilized powder
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, 40% Glycerol, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Endotoxin Level</b>	<1 EU/µg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	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.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	<p>The PTS Protein plays a crucial role in the biosynthesis of tetrahydrobiopterin, a vital cofactor for aromatic amino acid hydroxylases. This enzyme is instrumental in catalyzing the transformation of 7,8-dihydroneopterin triphosphate into 6-pyruvoyl tetrahydropterin, a key step in the biosynthetic pathway. The catalytic activity of the PTS Protein underscores its significance in facilitating the conversion necessary for the production of tetrahydrobiopterin, essential for the proper functioning of aromatic amino acid hydroxylases.</p>
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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