

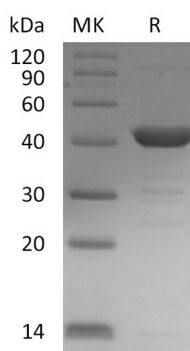
**Product Name: Recombinant Human UPB1 (C-6His)**  
**Catalog #: PEH0174**



## Summary

<b>Name</b>	BUP-1/UPB1/ $\beta$ -ureidopropionase
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE
<b>Endotoxin level</b>	<1 EU/ $\mu$ g as determined by LAL test.
<b>Construction</b>	Recombinant Human Beta-Ureidopropionase is produced by our E.coli expression system and the target gene encoding Met1-Glu384 is expressed with a 6His tag at the C-terminus.
<b>Accession #</b>	Q9UBR1
<b>Host</b>	E.coli
<b>Species</b>	Human
<b>Predicted Molecular Mass</b>	44.22 KDa
<b>Formulation</b>	Supplied as a 0.2 $\mu$ m filtered solution of PBS, pH 7.4.
<b>Shipping</b>	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
<b>Stability&amp;Storage</b>	Store at $\leq -70^{\circ}\text{C}$ , stable for 6 months after receipt. Store at $\leq -70^{\circ}\text{C}$ , stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
<b>Reconstitution</b>	

## SDS-PAGE image



## Background

<b>Alternative Names</b>	Beta-Ureidopropionase; BUP-1; Beta-Alanine Synthase; N-Carbamoyl-Beta-Alanine Amidohydrolase; UPB1; BUP1
<b>Background</b>	$\beta$ -Ureidopropionase is a cytoplasmic protein which belongs to the CN hydrolase

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family of BUP subfamily.  $\beta$ -Ureidopropionase binds one zinc ion per subunit, catalyzes the last step in the pyrimidine degradation pathway.  $\beta$ -Ureidopropionase can convert N-carbamyl-beta-aminoisobutyric acid and N-carbamyl-beta-alanine to beta-aminoisobutyric acid and beta-alanine, ammonia and carbon dioxide, respectively. The pyrimidine bases uracil and thymine are degraded via the consecutive action of dihydropyrimidine dehydrogenase (DHPDH), dihydropyrimidinase (DHP) and beta-ureidopropionase (UP) to beta-alanine and beta aminoisobutyric acid, respectively. Defects in  $\beta$ -Ureidopropionase are the cause of  $\beta$ -Ureidopropionase deficiency that is characterized by muscular hypotonia, dystonic movements, scoliosis, microcephaly and severe developmental delay.

### **Note**

For Research Use Only , Not for Diagnostic Use.