

Recombinant Human UPB1 (C-6His)

Catalog No: C210

Description 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.

Source E.coli

Alternative name Beta-Ureidopropionase; BUP-1; Beta-Alanine Synthase; N-Carbamoyl-Beta-Alanine

Amidohydrolase; UPB1; BUP1

Accession No. Q9UBR1

Predicted Molecular 44.22 kDa Weight

AP Molecular

Weight

42 kDa, reducing conditions.

Formulation

Supplied as a 0.2 µm filtered solution of PBS, pH 7.4.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg).

Shipping The product is shipped on dry ice/polar packs.

Upon receipt, store it immediately at the temperature listed below.

Storage Store at < -20°C, stable for 6 months after receipt.

Please minimize freeze-thaw cycles.

Background β-Ureidopropionase is a cytoplasmic protein which belongs to the CN hydrolase family of BUP

> subfamily, β-Ureidopropionase binds one zinc ion per subunit, catalyzes the last step in the pyrimidine degradation pathway. β -Ureidopropionase can convert N-carbamyl-beta-aminoisobutyric acid and Ncarbamyl-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 β -Ureidopropionase are the cause of β - Ureidopropionase deficiency that is characterized by muscular hypotonia, dystonic

movements, scoliosis, microcephaly and severe developmental delay.

