

Recombinant Human BUP1 Protein (His Tag)

Catalog No. PKSH033271

Note: Centrifuge before opening to ensure complete recovery of vial contents.

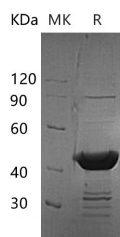
Description

Synonyms	Beta-Ureidopropionase;BUP-1;Beta-Alanine Synthase;N-Carbamoyl-Beta-Alanine Amidohydrolase;UPB1;BUP1
Species	Human
Expression Host	E.coli
Sequence	Met 1-Glu384
Accession	Q9UBR1
Calculated Molecular Weight	44.2 kDa
Observed molecular weight	42 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as a 0.2 µm filtered solution of PBS, pH7.4.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

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 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

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(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.