Recombinant Human BUP1 Protein (His Tag)

Catalog Number: PKSH033271

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

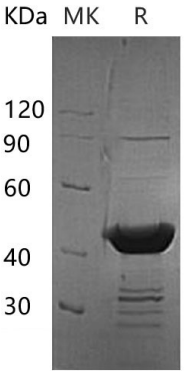
Description

Species	Human
Source	E.coli-derived Human BUP1 protein Met 1-Glu384, with an C-terminal His
Calculated MW	44.2 kDa
Observed MW	42 kDa
Accession	Q9UBR1
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
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.

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 (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.