Data Sheet (Cat.No.TMPJ-01374)

TargetMol

UPB1 Protein, Human, Recombinant (His)

General Information

Synonyms:	β-Ureidopropionase;Beta-Alanine Synthase;β-Alanine Synthase;BUP1;UPB1;N-Carbamoyl-β-Alanine Amidohydrolase;Beta-Ureidopropionase;N-Carbamoyl-Beta-Alanine Amidohydrolase;BUP-1
Protein Construction:	Met1-Glu384
Species:	Human
Expression Host:	E. coli
Accession:	Q9UBR1
Molecular Weight:	42 KDa (reducing condition)
AA Sequence:	Met1-Glu384

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Supplied as a 0.2 μm filtered solution of PBS, pH 7.4.

Preparation and Storage

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

Protein 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481