Recombinant BCAT1 protein (His tag)

Catalog Number	542419
Synonyms	BCAT(c)
Species	Human
Expression System	E. coli
Accession	P54687
Molecular Weight	Predictes a molecular mass of 44.62 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	1-386
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-386 aa (P54687) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Branched-chain-amino-acid aminotransferase, cytosolic (BCAT(c)) Fragment (1-386) is a high-quality, stable protein fragment designed for structural and biochemical studies. This product represents a soluble and functional unit of BCAT(c), enabling researchers to investigate the enzyme's role in branched-chain amino acid metabolism with precision and reliability. Branched-chain-amino-acid aminotransferase, cytosolic (BCAT(c)) (EC 2.6.1.42), encoded by the BCAT1 gene in Homo sapiens, catalyzes the initial step in the catabolism of essential branched-chain amino acids, including leucine, isoleucine, and valine. This enzyme is localized in the cytoplasm, where it plays a critical role in amino acid homeostasis and energy production. Its function is vital for understanding metabolic pathways, nutrient sensing, and related physiological processes, making it a key target for research in biochemistry and molecular biology.