Recombinant CMBL protein (His tag)

Catalog Number	545659
Species	Human
Expression System	E. coli
Accession	Q96DG6
Molecular Weight	Predictes a molecular mass of 29.57 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	2-245
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 2-245 aa (Q96DG6) 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	This product is a high-quality recombinant protein fragment of human Carboxymethylenebutenolidase homolog (CMBL), covering residues 2-245. It is designed for robust structural and biochemical studies, offering a stable and soluble unit that retains functional relevance for investigating cysteine hydrolase activity and prodrug activation mechanisms. Carboxymethylenebutenolidase homolog (CMBL), encoded by the CMBL gene in Homo sapiens, functions as a cysteine hydrolase with significant pharmacological implications. It plays a key role in converting the prodrug olmesartan medoxomil into its active metabolite olmerstatan, an angiotensin receptor blocker, primarily in the liver and intestine. Additionally, CMBL may activate beta-lactam antibiotics such as faropenem medoxomil and lenampicillin, highlighting its importance in drug metabolism. The protein is localized to the cytoplasm and cytosol, where it facilitates these hydrolytic processes, making it a valuable target for research in enzymology and therapeutic development.