

Recombinant Human CMBL Protein (His Tag)

Catalog No. PKSH031130

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

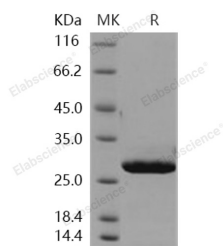
Description

Synonyms	JS-1
Species	Human
Expression Host	E.coli
Sequence	Met 1-Met 245
Accession	Q96DG6
Calculated Molecular Weight	30.0 kDa
Observed molecular weight	28 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 0.1% Brij35, pH 8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

Carboxymethylenebutenolidase (CMBL), also known as 4-carboxymethylenebut-2-en-4-olide lactonohydrolase, maleylacetate enol- lactonase, dienelactone hydrolase, and carboxymethylene butenolide hydrolase, is a hydrolase

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specially belonging to the family of hydrolases. It mainly acts on carboxylic ester bonds. CMBL is a human homolog of *Pseudomonas* diene lactone hydrolase involved in the bacterial halocatechol degradation pathway. The ubiquitous expression of human CMBL gene transcript in various tissues was observed. CMBL was demonstrated to be the primary olmesartan medoxomil (OM) bioactivating enzyme in the liver and intestine. The recombinant human CMBL expressed in mammalian cells was clearly shown to activate OM. The recombinant CMBL also converted other prodrugs having the same ester structure as OM, faropenem medoxomil and lenampicillin, to their active metabolites. CMBL exhibited a unique sensitivity to chemical inhibitors, thus, being distinguishable from other known esterases.