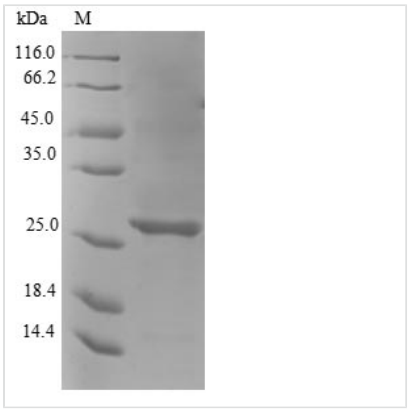
Recombinant Escherichia coli KHG/KDPG aldolase (eda)

Product Code	CSB-EP359248ENV
Relevance	Involved in the degradation of glucose via the Entner-Doudoroff pathway. Catalyzes the reversible, stereospecific retro-aldol cleavage of 2-Keto-3-deoxy-6-phosphogluconate (KDPG) to pyruvate and D-glyceraldehyde-3-phosphate. In the synthetic direction, it catalyzes the addition of pyruvate to electrophilic aldehydes with si-facial selectivity. It accepts some nucleophiles other than pyruvate, including 2-oxobutanoate, phenylpyruvate, and fluorobutanoate. It has a preference for the S-configuration at C2 of the electrophile.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P0A955
Product Type	Recombinant Protein
Immunogen Species	Escherichia coli (strain K12)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MKNWKTSAESILTTGPVVPVIVVKKLEHAVPMAKALVAGGVRVLEVTLRTECA VDAIRAIAKEVPEAIVGAGTVLNPQQLAEVTEAGAQFAISPGLTEPLLKAATEGTI PLIPGISTVSELMLGMDYGLKEFKFFPAEANGGVKALQAIAGPFSQVRFCPTGG ISPANYRDYLALKSVLCIGGSWLVPADALEAGDYDRITKLAREAVEGAKL
Lead Time	Delivery time may differ from different purchasing way or location, please kindly consult your local distributors for specific delivery time.
Research Area	Others
Source	E.coli
Gene Names	eda
Protein Names	2-keto-4-hydroxyglutarate aldolase ;KHG-aldolase2-dehydro-3-deoxy-phosphogluconate aldolase (EC:4.1.2.14) ;2-keto-3-deoxy-6-phosphogluconate aldolase ;KDPG-aldolasePhospho-2-dehydro-3-deoxygluconate aldolasePhospho-2-keto-3-deoxygluconate aldolase
Expression Region	1-213aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	26.3 kDa
Protein Description	Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.