Recombinant ECI2 protein (His tag)

Catalog Number	544174
Synonyms	DRS-1; Delta(3),delta(2)-enoyl-CoA isomerase; D3,D2-enoyl-CoA isomerase; Diazepam-binding inhibitor-related protein 1; DBI-related protein 1; Dodecenoyl-CoA isomerase; Hepatocellular carcinoma-associated antigen 88; Peroxisomal 3,2-trans-enoyl-CoA isomerase; pECI; Renal carcinoma antigen NY-REN-1
Species	Human
Expression System	E. coli
Accession	O75521
Molecular Weight	Predictes a molecular mass of 40.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	39-394
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 39-394 aa (O75521) 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 Enoyl-CoA delta isomerase 2 (ECI2) fragment (residues 39-394) is a high-purity protein designed for functional studies. This fragment fully encompasses the ACB domain, making it an ideal tool for investigating the isomerization activity of enoyl-CoA species in metabolic pathways. Enoyl-CoA delta isomerase 2 (ECI2) is a key enzyme in fatty acid metabolism, capable of isomerizing both 3-cis and 3-trans double bonds into the 2-trans form across various enoyl-CoA substrates, with a demonstrated preference for 3-trans substrates. The full-length protein exhibits dual subcellular localization, with isoform 1 found in mitochondria and isoform 2 localized to the peroxisome matrix, reflecting its critical role in cellular lipid metabolism. This enzyme, also known as DRS-1, pECI, or NY-REN-1 antigen, represents an important target for metabolic and cancer research due to its involvement in energy metabolism pathways.