Recombinant DHB13 protein (His tag)

Catalog Number	545309
Synonyms	17-beta-HSD 13; Hepatic retinol/retinal dehydrogenase; Short chain dehydrogenase/reductase family 16C member 3; Short-chain dehydrogenase/reductase 9
Species	Human
Expression System	E. coli
Accession	Q7Z5P4
Molecular Weight	Predictes a molecular mass of 33.06 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	20-300
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 20-300 aa (Q7Z5P4) 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 17-beta-HSD 13 Fragment (aa 20-300) is a high-purity protein designed for structural and biochemical studies. This 281-amino acid fragment encompasses key functional domains, offering a stable and soluble unit ideal for investigating hepatic lipid metabolism, steroid hormone regulation, and retinol/retinal dehydrogenase activities. 17-beta-HSD 13 is a multifunctional enzyme critical in hepatic lipid metabolism, catalyzing the oxidation of diverse substrates including 17beta-estradiol, retinol, retinal, and leukotriene B4. Isoform 2 localizes to lipid droplets and the endoplasmic reticulum, redistributing upon lipid droplet induction, while Isoform 1 remains cytoplasmic. Its roles in lipid homeostasis and potential implications in metabolic diseases make it a valuable target for research on liver function and lipid-associated disorders.