Recombinant DHB2 protein (His tag)

Catalog Number	537714
Synonyms	17-beta-HSD 2; 20 alpha-hydroxysteroid dehydrogenase; 20-alpha-HSD; E2DH; Estradiol 17-beta-dehydrogenase 2; Microsomal 17-beta-hydroxysteroid dehydrogenase; Short chain dehydrogenase/reductase family 9C member 2; Testosterone 17-beta-dehydrogenase
Species	Human
Expression System	E. coli
Accession	P37059
Molecular Weight	Predictes a molecular mass of 38.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	52-387
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 52-387 aa (P37059) 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 2 Fragment (aa 52-387) is a high-purity protein designed for structural and biochemical studies. This 336-amino acid fragment retains key enzymatic activity, enabling researchers to investigate the oxidation of potent 17beta-hydroxysteroids like estradiol and testosterone in a stable, soluble format. 17-beta-hydroxysteroid dehydrogenase type 2 (17-beta-HSD 2) is a critical enzyme in steroid metabolism, catalyzing the NAD-dependent oxidation of highly active 17beta-hydroxysteroids—including estradiol, testosterone, and dihydrotestosterone—into their less active forms. By converting estradiol to estrone, testosterone to androstenedione, and dihydrotestosterone to 5alpha-androstan-3,17-dione, it modulates the biological potency of these steroids, playing a key role in hormonal regulation. The enzyme also exhibits 20-alpha-hydroxysteroid dehydrogenase activity. Located in the endoplasmic reticulum membrane as a single-pass type II membrane protein, 17-beta-HSD 2 ensures precise control over local steroid concentrations, influencing processes such as hormone signaling and metabolic homeostasis.