Recombinant UD2B7 protein (His tag)

Catalog Number	542153
Synonyms	UDPGT 2B7; UGT2B7; 3,4-catechol estrogen-specific UDPGT; UDP-glucuronosyltransferase 2B9; UDPGT 2B9; UDPGTh-2
Species	Human
Expression System	E. coli
Accession	P16662
Molecular Weight	Predictes a molecular mass of 55.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band.

Product Information

Sequence Region	24-492
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 24-492 aa (P16662) 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 UDP-glucuronosyltransferase 2B7 (UGT2B7) Fragment (residues 24-492) is a high-purity, stable protein designed for structural and biochemical studies. This 469-amino acid fragment retains key functional regions, enabling researchers to investigate phase II biotransformation, drug metabolism, and detoxification pathways with enhanced solubility and experimental versatility. UDP-glucuronosyltransferase 2B7 (UGT2B7) is a crucial phase II biotransformation enzyme that catalyzes the conjugation of lipophilic substrates with glucuronic acid, increasing their water solubility for excretion. Located in the endoplasmic reticulum membrane as a single-pass membrane protein, UGT2B7 plays essential roles in detoxification by metabolizing drugs (including losartan, mycophenolate), xenobiotics, and endogenous compounds such as steroid hormones (androgens, estrogens), retinoic acid, bile acids, and eicosanoids like arachidonic acid derivatives. Its activity impacts drug efficacy, hormone regulation, and cellular detoxification processes, making it a significant target for pharmacological and toxicological research.