Recombinant UDB15 protein (His tag)

Catalog Number	537841
Synonyms	UDPGT 2B15; UGT2B15; HLUG4; UDP-glucuronosyltransferase 2B8; UDPGT 2B8; UDPGTh-3
Species	Human
Expression System	E. coli
Accession	P54855
Molecular Weight	Predictes a molecular mass of 55.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band.

Product Information

Sequence Region	24-494
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 24-494 aa (P54855) 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 2B15 (UGT2B15) Fragment (residues 24-494) is a high-purity protein designed for structural and biochemical studies. This 471-amino acid fragment retains key functional properties, offering a stable and soluble unit ideal for investigating phase II biotransformation and detoxification pathways. UDP-glucuronosyltransferase 2B15 (UGT2B15) is a critical enzyme in phase II biotransformation, catalyzing the conjugation of lipophilic substrates with glucuronic acid to enhance water solubility and facilitate excretion. It plays an essential role in detoxifying drugs, xenobiotics, and endogenous compounds, including steroid hormones such as androgens (e.g., testosterone) and estrogens (e.g., estradiol). The enzyme also glucuronidates phenolic compounds, phenylpropanoids, and monoterpenoid alcohols, contributing to the metabolism of natural products and environmental chemicals. UGT2B15 is localized to the endoplasmic reticulum membrane as a single-pass membrane protein, where it performs its metabolic functions. This recombinant fragment provides a valuable tool for studying its catalytic mechanisms and substrate specificity in vitro.