Recombinant GALT protein (His tag)

Catalog Number	537448
Synonyms	Gal-1-P uridylyltransferase; UDP-glucose--hexose-1-phosphate uridylyltransferase
Species	Human
Expression System	E. coli
Accession	P07902
Molecular Weight	Predictes a molecular mass of 45.02 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	1-379
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-379 aa (P07902) 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 Galactose-1-phosphate uridylyltransferase (Gal-1-P uridylyltransferase) fragment (residues 1-379), a key enzyme in galactose metabolism. This stable, soluble fragment is ideal for structural studies and biochemical characterization of galactose metabolic pathways. Galactose-1-phosphate uridylyltransferase (EC 2.7.7.12) plays an essential role in galactose metabolism, catalyzing the conversion of galactose-1-phosphate and UDP-glucose to glucose-1-phosphate and UDP-galactose. This enzyme is critical for the Leloir pathway of galactose metabolism, enabling the proper utilization of galactose as an energy source and its incorporation into glycoproteins and glycolipids. The functional importance of GALT is well-documented in scientific literature, with mutations in this enzyme leading to classic galactosemia, a serious metabolic disorder that underscores its vital role in human physiology.