Recombinant SO4C1 protein (His tag)

Catalog Number	545259
Synonyms	SLCO4C1; OATP-H; Organic anion transporter M1; OATP-M1; Organic anion transporting polypeptide 4C1; OATP4C1; Solute carrier family 21 member 20
Species	Human
Expression System	E. coli
Accession	Q6ZQN7
Molecular Weight	Predictes a molecular mass of 13.58 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	472-580
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 472-580 aa (Q6ZQN7) 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 SLCO4C1 (Solute carrier organic anion transporter family member 4C1) Fragment (aa 472-580). This high-purity protein fragment encompasses the Kazal-like domain, providing an essential tool for investigating organic anion transport mechanisms, renal function, and uremic toxin clearance in targeted research applications. SLCO4C1, also known as OATP-H or OATP4C1, is a multi-pass membrane protein localized to the basolateral membrane of kidney proximal tubule cells. It mediates sodium- and ATP-independent transport of organic anions including steroid conjugates, thyroid hormones (T3, T4), pharmacological substances (digoxin, methotrexate), and key signaling molecules (cAMP). Functioning as an uptake transporter, SLCO4C1 plays critical roles in renal reabsorption and secretion, particularly in the clearance of uremic toxins like ADMA (asymmetrical dimethylarginine) while handling cardioprotective biomarkers such as L-homoarginine. Its activity is enhanced in acidic environments and may involve bicarbonate exchange. Additional roles in sperm maturation through epididymal homeostasis and seminal vesicle secretory functions have been proposed. The protein's bidirectional transport capability highlights its dual protective function in renal and reproductive physiology.