Recombinant S22AB protein (His tag)

Catalog Number	548353
Synonyms	Organic anion transporter 4; OAT4; Organic anion:dicarboxylate exchanger OAT4
Species	Human
Expression System	E. coli
Accession	Q9NSA0
Molecular Weight	Predictes a molecular mass of 13.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	32-142
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 32-142 aa (Q9NSA0) 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 SLC22A11 (OAT4) Fragment (32-142) is a high-quality protein product designed for structural and biochemical research. This 111-amino acid fragment represents a stable and soluble unit of the Solute Carrier Family 22 Member 11 (Organic Anion Transporter 4), specifically engineered to facilitate studies of this important transporter protein. Solute Carrier Family 22 Member 11 (OAT4) is a multi-pass membrane protein that functions as an antiporter mediating the transport of conjugated steroids, organic anions, and various compounds. In humans, OAT4 plays crucial roles in placental absorption of fetal-derived steroid sulfates (including estrone sulfate and dehydroepiandrosterone sulfate) and renal reabsorption of organic anions such as urate. The protein is expressed at the apical membrane of proximal tubule epithelial cells in the kidney and at the basal membrane of syncytiotrophoblast cells in the placenta, where it facilitates the exchange of anionic compounds including steroid sulfates, prostaglandins, drugs, and waste products. OAT4 also mediates the transport of glutamate and aspartate, with glutamate efflux potentially driving placental uptake of estrone sulfate. The selected fragment (32-142) was computationally designed to provide a stable, soluble representation of the protein suitable for detailed structural and functional analyses.