Recombinant STEA2 protein (His tag)

Catalog Number	543194
Synonyms	Prostate cancer-associated protein 1; Protein up-regulated in metastatic prostate cancer; PUMPCn; Six-transmembrane epithelial antigen of prostate 2; SixTransMembrane protein of prostate 1
Species	Human
Expression System	E. coli
Accession	Q8NFT2
Molecular Weight	Predictes a molecular mass of 24.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-207
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 1-207 aa (Q8NFT2) 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 Metalloreductase STEAP2 (EC 1.16.1.-) Fragment (residues 1-207) is a high-purity protein designed for structural and biochemical studies. This fragment represents a stable, soluble unit of the prostate cancer-associated protein, ideal for investigating its role as a NADPH-dependent ferric-chelate and copper reductase. STEAP2 is an integral membrane protein that functions as a NADPH-dependent ferric-chelate reductase, transferring electrons across membranes to reduce Fe(3+) chelates and Cu(2+) to Cu(1+). This electron transfer occurs sequentially through NADPH, FAD, heme, and finally to the metal substrate. The protein is implicated in prostate cancer progression, being up-regulated in metastatic disease, and is localized to both endosome and cell membranes as a multi-pass transmembrane protein. The provided fragment (residues 1-207) was computationally selected to offer a soluble, stable representation of the protein for functional and structural analyses.