Recombinant EPPI protein (His tag)

Catalog Number	544253
Synonyms	Cancer/testis antigen 71; CT71; Epididymal protease inhibitor; Protease inhibitor WAP7; Serine protease inhibitor-like with Kunitz and WAP domains 1; WAP four-disulfide core domain protein 7
Species	Human
Expression System	E. coli
Accession	O95925
Molecular Weight	Predictes a molecular mass of 14.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	22-133
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 22-133 aa (O95925) 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 Eppin (EPPIN) Fragment (aa 22-133) is a high-purity protein designed for studying male reproductive biology and fertility. This fragment includes the complete WAP and BPTI/Kunitz inhibitor domains, making it an ideal tool for investigating serine protease inhibition, sperm motility regulation, and antimicrobial activity in the epididymis and ejaculate. Eppin (Epididymal protease inhibitor) is a serine protease inhibitor essential for male reproduction and fertility. It functions by modulating the hydrolysis of SEMG1 by KLK3/PSA, providing antimicrobial protection for spermatozoa in the ejaculate coagulum, and binding SEMG1 to inhibit sperm motility. The protein is secreted and localized to the cell surface, specifically bound to testicular and ejaculate spermatozoa on both the head and tail regions, underscoring its critical role in reproductive processes.