Recombinant IPO4 protein (His tag)

Catalog Number	547815
Synonyms	Imp4; Importin-4b; Imp4b; Ran-binding protein 4; RanBP4
Species	Human
Expression System	E. coli
Accession	Q8TEX9
Molecular Weight	Predictes a molecular mass of 46.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	666-1081
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 666-1081 aa (Q8TEX9) 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 Importin-4 (Imp4) Fragment (666-1081) is a high-quality, stable protein fragment engineered for nuclear transport research. This 416-amino acid segment retains key functional characteristics, making it ideal for structural studies, biochemical assays, and investigations into nuclear import mechanisms. Importin-4 (IPO4 gene) is a nuclear transport receptor in Homo sapiens that mediates the nuclear import of proteins including histones, RPS3A, TNP2, and the vitamin D receptor. It functions by recognizing nuclear localization signals (NLS) in cargo substrates, facilitating docking to the nuclear pore complex and subsequent translocation through a Ran-dependent mechanism. The protein shuttles between cytoplasm and nucleus, with nuclear import directionality maintained by asymmetric Ran GTP/GDP distribution. Importin-4 plays critical roles in histone transport (particularly H3-H4 dimers in complex with ASF1) and has been implicated in viral protein import. The protein localizes to both cytoplasm and nucleus, reflecting its dynamic transport function.