Recombinant IPO8 protein (His tag)

Catalog Number	541743
Synonyms	Imp8; Ran-binding protein 8; RanBP8
Species	Human
Expression System	E. coli
Accession	O15397
Molecular Weight	Predictes a molecular mass of 12.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	941-1037
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 941-1037 aa (O15397) 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 Importin-8 (Imp8) Fragment (residues 941-1037) from Homo sapiens, a stable and soluble protein unit ideal for structural and biochemical studies. This fragment supports research into nuclear transport mechanisms and protein-protein interactions, offering a reliable tool for investigating the role of Importin-8 in cellular processes. Importin-8 (Imp8), also known as Ran-binding protein 8 (RanBP8), is a nuclear transport receptor in Homo sapiens involved in the import of proteins into the nucleus. It functions either autonomously or in association with importin-beta subunit KPNB1, recognizing nuclear localization signals (NLS) and facilitating translocation through the nuclear pore complex in a Ran-dependent, energy-requiring manner. Importin-8 dissociates from cargo upon Ran binding at the nucleoplasmic side and is re-exported to the cytoplasm. It mediates the nuclear import of various cargos, including SRP19, and is implicated in shuttling Argonaute-microRNA complexes, JUN, RELA/NF-kappa-B p65, EIF4E, and SMAD transcription factors, playing a critical role in signaling pathways such as TGF-beta and BMP. The protein localizes to both the cytoplasm and nucleus, underscoring its dynamic involvement in nucleocytoplasmic transport.