Recombinant CATIN protein (His tag)

Catalog Number	538601
Synonyms	Renal carcinoma antigen NY-REN-24
Species	Human
Expression System	E. coli
Accession	Q8WUQ7
Molecular Weight	Predictes a molecular mass of 42.17 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	131-472
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 131-472 aa (Q8WUQ7) 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	This recombinant protein product features a stable and soluble fragment (residues 131-472) of human Splicing factor Cactin, also known as Renal carcinoma antigen NY-REN-24. It is designed for structural and biochemical studies, offering researchers a functional unit to investigate Cactin's roles in pre-mRNA splicing and innate immune regulation. Splicing factor Cactin, encoded by the CACTIN gene, is a multifunctional protein primarily localized in the nucleus, with some presence in the cytoplasm. It plays a critical role in pre-mRNA splicing by facilitating the excision of specific introns, including those in CDCA5/Sororin, which regulates sister chromatid cohesion. Additionally, Cactin acts as a key negative regulator in innate immune responses, modulating Toll-like receptor, interferon-regulatory factor (IRF), and canonical NF-kappa-B signaling pathways. It contributes to controlling the transcriptional activation of NF-kappa-B target genes in response to pro-inflammatory stimuli, highlighting its importance in cellular and immune processes.