Recombinant A1CF protein (His tag)

Catalog Number	548327
Synonyms	APOBEC1-stimulating protein
Species	Human
Expression System	E. coli
Accession	Q9NQ94
Molecular Weight	Predictes a molecular mass of 35.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	1-305
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-305 aa (Q9NQ94) 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 APOBEC1 Complementation Factor (A1CF) Fragment (aa 1-305) - A high-purity protein fragment encompassing all three RNA recognition motifs (RRM 1-3), essential for studying APOB mRNA editing complex formation and RNA binding functions in lipoprotein metabolism research. APOBEC1 complementation factor (A1CF) is a crucial component of the apolipoprotein B mRNA editing enzyme complex, responsible for the post-transcriptional editing that converts a CAA codon to a UAA stop codon in APOB mRNA. This protein binds directly to APOB mRNA and facilitates docking of the catalytic subunit APOBEC1, enabling cytosine deamination while protecting the edited mRNA from nonsense-mediated decay. A1CF exhibits dynamic subcellular localization, predominantly nuclear where it associates with heterochromatin, but also cytoplasmic at the endoplasmic reticulum surface, with shuttling capabilities between compartments mediated by nuclear transport mechanisms.