Recombinant DSRAD protein (His tag)

Catalog Number	542429
Synonyms	DRADA; 136 kDa double-stranded RNA-binding protein; p136; Interferon-inducible protein 4; IFI-4; K88DSRBP
Species	Human
Expression System	E. coli
Accession	P55265
Molecular Weight	Predictes a molecular mass of 45.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	839-1226
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 839-1226 aa (P55265) 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 388-amino acid fragment (residues 839-1226) of human Double-stranded RNA-specific adenosine deaminase (ADAR), specifically designed to encompass the complete A-to-I editase domain (residues 886-1221). This fragment serves as an essential tool for researchers studying RNA editing mechanisms, domain-specific functions, and enzymatic activity in a purified, functional format. Double-stranded RNA-specific adenosine deaminase (ADAR), encoded by the ADAR gene in humans, catalyzes the hydrolytic deamination of adenosine to inosine in double-stranded RNA—a critical process known as A-to-I RNA editing. This enzyme significantly influences gene expression and function through multiple mechanisms: altering protein sequences by changing codons during mRNA translation, modifying pre-mRNA splicing patterns, affecting RNA stability, and impacting viral RNA replication. ADAR interacts with both cellular RNAs (including neurotransmitter receptors and cancer-associated proteins) and viral RNAs (such as HIV-1, hepatitis C, and measles virus), exhibiting either proviral or antiviral effects depending on the context. The full-length protein localizes to both the cytoplasm and nucleus, shuttling between compartments via transport mechanisms involving TNPO1, and plays roles in interferon-inducible pathways. The provided fragment preserves the core catalytic domain, enabling focused investigation into ADAR's RNA editing functions without interference from regulatory regions.