Recombinant KHDR2 protein (His tag)

Catalog Number	538222
Synonyms	Sam68-like mammalian protein 1; SLM-1; hSLM-1
Species	Human
Expression System	E. coli
Accession	Q5VWX1
Molecular Weight	Predictes a molecular mass of 22.34 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	1-180
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-180 aa (Q5VWX1) 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 KHDRBS2 (SLM-1) Fragment (aa 1-180): A high-purity protein fragment encompassing the complete KH RNA-binding domain, ideal for investigating RNA interactions, alternative splicing mechanisms, and signal transduction pathways in human cellular models. KHDRBS2 (Sam68-like mammalian protein 1) is a human RNA-binding protein that regulates alternative splicing by influencing mRNA splice site selection and exon inclusion. It binds poly(A) and poly(U) homopolymers and directly interacts with purine-rich exonic enhancers, such as in CD44 pre-mRNA, to promote exon incorporation. The protein also modulates splicing of neurexin genes (e.g., NRXN1 and NRXN3), where it can act synergistically or antagonistically with SAM68. Phosphorylation by kinases like PTK6 and FYN inhibits its RNA-binding and splicing regulatory functions, and it may serve as an adapter for Src kinases during mitosis. KHDRBS2 is localized to the nucleus, underscoring its role in nuclear RNA processing and post-transcriptional regulation.