Recombinant NELFE protein (His tag)

Catalog Number	539817
Synonyms	NELF-E; RNA-binding protein RD
Species	Human
Expression System	E. coli
Accession	P18615
Molecular Weight	Predictes a molecular mass of 15.02 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	260-380
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 260-380 aa (P18615) 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 carefully designed fragment (amino acids 260-380) of Human Negative elongation factor E (NELF-E), encompassing the critical RNA recognition motif (RRM) domain. This fragment serves as an essential tool for studying the RNA-binding functions of NELF-E in transcriptional regulation mechanisms. Negative elongation factor E (NELF-E) is a crucial component of the NELF complex that negatively regulates transcription elongation by RNA polymerase II. The full-length protein functions by associating with the DSIF complex to induce transcriptional pausing, which is subsequently counteracted by the P-TEFb kinase complex. NELF-E provides the strongest RNA-binding activity within the NELF complex and is believed to initiate recruitment of the complex to RNA targets. The protein localizes to the nucleus and chromatin, with phosphorylation by P-TEFb promoting its release from chromatin. Additionally, the NELF complex has been implicated in HIV-1 latency mechanisms, potentially involving recruitment of PCF11 to paused RNA polymerase II.