Recombinant MIER1 protein (His tag)

Catalog Number	545407
Synonyms	Early response 1; Er1; Mi-er1; hMi-er1
Species	Human
Expression System	E. coli
Accession	Q8N108
Molecular Weight	Predictes a molecular mass of 25.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	171-369
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 171-369 aa (Q8N108) 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 Mesoderm induction early response protein 1 (MIER1) fragment (residues 171-369), encompassing the complete ELM2 and SANT domains. This high-purity protein is an essential tool for investigating transcriptional repression mechanisms, HDAC1 recruitment, and chromatin remodeling in cellular and biochemical assays. Mesoderm induction early response protein 1 (MIER1) is a transcriptional repressor that regulates gene expression, including SP1 target genes, by recruiting histone deacetylase 1 (HDAC1) to facilitate chromatin silencing. The full-length protein localizes to the nucleus in multiple isoforms (isoforms 1-3), while other isoforms (4-6) are cytoplasmic, indicating potential functional diversity in subcellular regulation. This recombinant fragment specifically targets the ELM2 and SANT domains, which are critical for its repressive activity and protein interactions.