Recombinant MAEL protein (His tag)

Catalog Number	547990
Species	Human
Expression System	E. coli
Accession	Q96JY0
Molecular Weight	Predictes a molecular mass of 26.40 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	110-324
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 110-324 aa (Q96JY0) 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 Protein Maelstrom Homolog (MAEL) Fragment (aa 110-324) is a highly stable and soluble protein fragment designed for structural and biochemical studies. This product enables researchers to investigate the critical role of MAEL in spermatogenesis and transposable element repression, offering a reliable tool for advancing germline integrity research. The full-length Protein Maelstrom Homolog (MAEL) in Homo sapiens plays a central role during spermatogenesis by repressing transposable elements, which is essential for maintaining germline integrity. It functions through the piRNA metabolic process, forming complexes with piRNAs and Piwi proteins to mediate methylation and repression of transposons during meiosis. MAEL is also involved in the secondary piRNAs metabolic process and is required for the localization of germ-cell factors to the meiotic nuage. Subcellularly, it localizes to the cytoplasm and nucleus, specifically to piP-bodies within the meiotic nuage, a germ-cell-specific organelle critical for transposon repression.