Recombinant HORM2 protein (His tag)

Catalog Number	548779
Species	Human
Expression System	E. coli
Accession	Q8N7B1
Molecular Weight	Predictes a molecular mass of 28.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	1-239
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 1-239 aa (Q8N7B1) 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 HORMA domain-containing protein 2 (HORMAD2) fragment (amino acids 1-239) from Homo sapiens, encompassing the complete HORMA functional domain. This high-purity protein is an essential tool for investigating synapsis surveillance mechanisms and ATR recruitment during meiosis, enabling targeted studies of domain-specific functions in cellular quality control. HORMA domain-containing protein 2 (HORMAD2) is a nuclear protein critical for meiotic prophase surveillance in both male and female gametogenesis. It localizes preferentially to unsynapsed chromosomal regions and plays a key role in recruiting ATR activity to monitor synapsis integrity. HORMAD2 is essential for establishing meiotic silencing of unsynapsed chromatin (MSUC) and facilitates BRCA1-dependent ATR activation on sex chromosomes, which is vital for proper sex body formation. Its function is regulated by TRIP13-mediated depletion from synapsed chromosomes, underscoring its importance in meiotic quality control pathways.