Recombinant PRND protein (His tag)

Catalog Number	543869
Synonyms	PrPLP; Prion protein 2
Species	Human
Expression System	E. coli
Accession	Q9UKY0
Molecular Weight	Predictes a molecular mass of 13.19 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	53-152
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 53-152 aa (Q9UKY0) 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 Prion-like protein doppel (PrPLP) fragment (residues 53-152) is a high-purity, stable protein designed for structural and biochemical studies. This 100-amino acid fragment retains key functional regions, making it an ideal tool for investigating the protein's role in male fertility and copper binding. The full-length Prion-like protein doppel (PrPLP), also known as Prion protein 2, is encoded by the PRND gene in humans and is essential for normal acrosome reaction and male fertility. It functions as a copper-binding protein, capable of binding Cu^{2+} ions, which may contribute to its biological activity. PrPLP is localized to the cell membrane, where it is anchored via a GPI (glycosylphosphatidylinositol) linkage, facilitating its role in cellular signaling or interactions. The selected fragment (53-152) represents a stable, soluble region optimized for experimental applications, enabling researchers to explore its structure-function relationships without the complexities of the full-length membrane-associated protein.