Recombinant PRAX protein (His tag)

Catalog Number	543530
Species	Human
Expression System	E. coli
Accession	Q9BXM0
Molecular Weight	Predictes a molecular mass of 12.93 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	1-101
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-101 aa (Q9BXM0) 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	Discover our high-quality recombinant Periaxin (PRX) fragment (amino acids 1-101), encompassing the essential PDZ domain. This fragment is expertly designed for researchers studying the scaffolding functions of Periaxin in nerve impulse transmission, myelin maintenance, and cellular structural integrity, providing a precise tool for domain-specific investigations. Periaxin, encoded by the PRX gene in Homo sapiens, is a crucial scaffolding protein that forms part of dystroglycan complexes in Schwann cells and EZR/AHNAK-containing complexes in eye lens fiber cells. It is essential for maintaining the peripheral myelin sheath, enabling normal nerve impulse transmission and sensory perception. Periaxin facilitates the transport of MBP mRNA, supports remyelination post-injury, and regulates Schwann cell elongation and internode length at nodes of Ranvier. Additionally, it contributes to the formation of appositions between the myelin sheath and Schwann cell plasma membrane, as well as Cajal bands and Schmidt-Lanterman incisures. In eye lens cells, it ensures proper plasma membrane composition and morphology. Subcellularly, it localizes to the cell membrane (as a peripheral membrane protein on the cytoplasmic side), nucleus, cytoplasm, and cell junctions, with roles varying by isoform and cellular context.