Recombinant SORCN protein (His tag)

Catalog Number	544548
Synonyms	22 kDa protein; CP-22; CP22; V19
Species	Human
Expression System	E. coli
Accession	P30626
Molecular Weight	Predictes a molecular mass of 20.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	32-198
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 32-198 aa (P30626) 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 Sorcin (22 kDa protein) Fragment (32-198) is a high-purity protein designed for studying calcium signaling and excitation-contraction coupling. This 167-amino acid fragment specifically encompasses the functional EF-hand domains 2, 3, and 4, making it an ideal tool for investigating calcium-binding mechanisms and their role in cardiac function. Sorcin (SRI) is a calcium-binding protein that plays a critical role in modulating excitation-contraction coupling in the heart. It contributes to calcium homeostasis within the sarcoplasmic reticulum and regulates the activity of RYR2 calcium channels, which are essential for proper cardiac muscle function. The protein is primarily located in the cytoplasm but relocates to the sarcoplasmic reticulum membrane in response to elevated calcium levels, highlighting its dynamic role in calcium-dependent signaling pathways. This recombinant fragment allows researchers to focus specifically on the EF-hand domains responsible for calcium binding and their functional contributions to Sorcin's regulatory activities.