Recombinant ANKR2 protein (His tag)

Catalog Number	543571
Synonyms	Skeletal muscle ankyrin repeat protein; hArpp
Species	Human
Expression System	E. coli
Accession	Q9GZV1
Molecular Weight	Predictes a molecular mass of 30.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	98-360
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 98-360 aa (Q9GZV1) 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 ANKRD2 Fragment (aa 98-360) is a high-quality, soluble protein derived from the human Ankyrin repeat domain-containing protein 2. This fragment is engineered for stability and is ideal for investigating the protein's role as a negative regulator of myocyte differentiation and its involvement in muscle development and stress response. Ankyrin repeat domain-containing protein 2 (ANKRD2), also known as skeletal muscle ankyrin repeat protein, functions as a negative regulator of myocyte differentiation. It interacts with both sarcoplasmic structural proteins and nuclear proteins to modulate gene expression during muscle development and in response to muscle stress. Subcellularly, it localizes to the cytoplasm, myofibril, sarcomere (specifically the I band), cytosol, nucleus, and PML bodies. In differentiated striated muscle cells, it is cytosolic and enriched in the I band, while in proliferating and undifferentiated myoblasts, it resides in the nucleus and PML bodies. Upon muscle stress, it associates with euchromatin in the nucleus of myocytes, highlighting its dynamic role in cellular signaling and gene regulation.