Recombinant ACL6B protein (His tag)

Catalog Number	537342
Synonyms	53 kDa BRG1-associated factor B; Actin-related protein Baf53b; ArpNalpha; BRG1-associated factor 53B; BAF53B
Species	Human
Expression System	E. coli
Accession	O94805
Molecular Weight	Predictes a molecular mass of 48.54 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	1-426
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 1-426 aa (O94805) 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 Actin-like protein 6B (ACTL6B) fragment (1-426) from Homo sapiens, a 426-amino acid stable and soluble unit ideal for investigating chromatin remodeling mechanisms and neuronal development. This high-purity fragment supports structural, biochemical, and functional studies of the neuron-specific BAF complex. Actin-like protein 6B (ACTL6B) is a key component of the SWI/SNF chromatin remodeling complexes, which alter DNA-nucleosome topology in an ATP-dependent manner to regulate gene transcription. Specifically, it functions within the neuron-specific BAF (nBAF) complex, where it facilitates dendritic outgrowth and postmitotic neural maturation by targeting chromatin remodeling activities to promoters of genes critical for neuronal development. Unlike its homolog ACTL6A in neural progenitors, ACTL6B is incorporated into nBAF complexes during neuronal differentiation and is essential for dendritic growth, though not required for complex assembly. The protein localizes to the nucleus, underscoring its direct role in epigenetic regulation of neural gene expression.