Recombinant SMCA2 protein (His tag)

Catalog Number	537805
Synonyms	SAMRCA2; BRG1-associated factor 190B; BAF190B; Probable global transcription activator SNF2L2; Protein brahma homolog; hBRM; SNF2-alpha
Species	Human
Expression System	E. coli
Accession	P51531
Molecular Weight	Predictes a molecular mass of 16.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	1378-1508
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 1378-1508 aa (P51531) 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	This product is a high-quality recombinant protein fragment of human SMARCA2 (SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 2), encompassing amino acids 1378-1508. It contains the full Bromo domain, making it an ideal tool for investigating chromatin remodeling, histone recognition, and transcriptional regulation mechanisms in epigenetic research. SMARCA2 is an ATP-dependent chromatin remodeling enzyme crucial for transcriptional activation and repression of select genes. As a core ATPase component of the SWI/SNF complex, it alters DNA-nucleosome topology and chromatin structure. The protein plays key roles in neural development through its involvement in neural progenitor-specific (npBAF) and neuron-specific (nBAF) chromatin remodeling complexes, which are essential for neural stem cell self-renewal and dendrite growth regulation. SMARCA2 localizes to the nucleus and is recruited to sites of DNA damage, highlighting its importance in genome maintenance and epigenetic regulation.