Recombinant SAPC2 protein (His tag)

Catalog Number	540631
Synonyms	Tumor specificity and mitosis phase-dependent expression protein; TS/MDEP; p42.3
Species	Human
Expression System	E. coli
Accession	Q86UD0
Molecular Weight	Predictes a molecular mass of 20.70 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	224-394
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 224-394 aa (Q86UD0) 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	Introducing the recombinant Suppressor APC domain-containing protein 2 (SAPCD2) fragment (residues 224-394), a highly stable and soluble protein unit ideal for investigating its roles in mitotic spindle orientation, cell proliferation, and tumor growth. This fragment, derived from human SAPCD2 (also known as p42.3 or TS/MDEP), is optimized for structural and biochemical studies, offering researchers a reliable tool to explore key cellular mechanisms. The full-length Suppressor APC domain-containing protein 2 (SAPCD2) is a multifunctional human protein that plays a critical role in regulating planar mitotic spindle orientation, particularly in retinal progenitor cells, where it promotes symmetric terminal divisions. It functions by negatively regulating the mitotic apical cortex localization of GPSM2 and is involved in positive regulation of cell proliferation and tumor cell growth, highlighting its significance in developmental biology and oncology. SAPCD2 localizes to the cytoplasm, nucleus, cell cortex, apical cell membrane, and tight junctions, with dynamic localization during mitosis—specifically at the apical cortical region in M phase and pole cortical regions in horizontally dividing retinal progenitor cells. This protein's involvement in both normal cellular processes and pathological conditions, such as cancer, underscores its importance as a research target for understanding cell division and tumorigenesis.