Recombinant SPD2A protein (His tag)

Catalog Number	540478
Synonyms	Adapter protein TKS5; Five SH3 domain-containing protein; SH3 multiple domains protein 1; Tyrosine kinase substrate with five SH3 domains
Species	Human
Expression System	E. coli
Accession	Q5TCZ1
Molecular Weight	Predictes a molecular mass of 17.00 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	1-129
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-129 aa (Q5TCZ1) 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 SH3 and PX domain-containing protein 2A (TKS5) fragment (amino acids 1-129) from Homo sapiens, encompassing the complete PX domain. This high-purity protein is an essential tool for investigating phosphoinositide binding, invadopodia formation, and cancer cell invasiveness in targeted research applications. SH3PXD2A, also known as TKS5, is an adapter protein critical for invadopodia and podosome formation, extracellular matrix degradation, and the invasiveness of certain cancer cells. It functions by binding matrix metalloproteinases (ADAMs), NADPH oxidases (NOXs), and phosphoinositides, facilitating reactive oxygen species (ROS) generation and localization. The protein localizes to the cytoplasm in normal cells and to podosomes in SRC-transformed cells, playing a key role in processes such as the neurotoxic effects of amyloid-beta peptide in association with ADAM12. The recombinant fragment (1-129) includes the PX domain, enabling focused studies on domain-specific interactions and mechanisms.