Recombinant WDR24 protein (His tag)

Catalog Number	545753
Synonyms	WD repeat-containing protein 24
Species	Human
Expression System	E. coli
Accession	Q96S15
Molecular Weight	Predictes a molecular mass of 42.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	1-358
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 1-358 aa (Q96S15) 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 Human GATOR2 complex protein WDR24 (EC 2.3.2.27) fragment (residues 1-358) is a high-quality, soluble protein designed for structural and biochemical studies. This fragment represents a stable, catalytically active unit of WDR24, essential for investigating its role in amino acid sensing and mTORC1 signaling regulation. WDR24 is a catalytic component of the GATOR2 complex, a key regulator in the amino acid-sensing branch of the mTORC1 signaling pathway. As an E3 ubiquitin-protein ligase, WDR24 mediates 'Lys-6'-linked ubiquitination of the NPRL2 subunit in the GATOR1 complex, leading to GATOR1 inactivation and subsequent mTORC1 activation under amino acid-rich conditions. Beyond mTORC1 regulation, WDR24 promotes lysosomal acidification and facilitates autophagic flux. The protein localizes to the lysosome membrane, underscoring its central role in nutrient sensing and cellular homeostasis. This recombinant fragment enables detailed mechanistic studies of WDR24's catalytic functions and interactions within the GATOR2 complex.