Recombinant RBCC1 protein (His tag)

Catalog Number	547810
Synonyms	FAK family kinase-interacting protein of 200 kDa; FIP200
Species	Human
Expression System	E. coli
Accession	Q8TDY2
Molecular Weight	Predictes a molecular mass of 55.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 70 kDa band.

Product Information

Sequence Region	932-1391
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 932-1391 aa (Q8TDY2) 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 RB1CC1 (FIP200) Fragment (aa 932-1391) is a high-quality protein product designed for structural and biochemical studies. This fragment represents a stable and soluble region of the full-length RB1-inducible coiled-coil protein 1, a key regulator of autophagy, DNA damage response, and cellular signaling pathways. Ideal for researchers investigating molecular mechanisms in cell biology and disease. The full-length RB1CC1 (FIP200) protein, encoded by the RB1CC1 gene in Homo sapiens, plays a multifaceted role in cellular processes. It is critically involved in autophagy, regulating both early and late stages of autophagosome formation and participating in xenophagy during bacterial infections. Additionally, FIP200 functions in DNA damage repair, modulates TGF-beta signaling, and acts as a transcription factor to influence the RB1 pathway and muscular differentiation. Its subcellular localization spans the nucleus, cytoplasm, cytosol, preautophagosomal structures, and lysosomes, with dynamic redistribution under stress conditions such as starvation. This protein is essential for fetal hematopoiesis and neuronal homeostasis, highlighting its broad significance in cellular physiology and potential relevance to disease mechanisms.