Recombinant BTBD8 protein (His tag)

Catalog Number	538226
Synonyms	AP2-interacting clathrin-endocytosis; APache
Species	Human
Expression System	E. coli
Accession	Q5XKL5
Molecular Weight	Predictes a molecular mass of 40.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	186-528
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 186-528 aa (Q5XKL5) 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 BTB/POZ domain-containing protein 8 (BTBD8) fragment (aa 186-528), encompassing the complete BTB domain. This high-quality protein is ideal for studying clathrin-mediated endocytosis mechanisms and synaptic function in neuronal development and synaptic vesicle recycling. BTB/POZ domain-containing protein 8 (APache) is a key regulator of clathrin-mediated endocytosis at neuronal synapses. The full-length protein plays crucial roles in both neuronal development and synaptic vesicle recycling in mature neurons, processes essential for normal synaptic transmission. BTBD8 localizes to various cellular compartments including axons, presynaptic terminals, clathrin-coated vesicles, and the nucleus, with its distribution changing during neuronal maturation. In primary cultures, it primarily localizes to axonal and presynaptic regions in mature neurons, while in developing neurons it's found in cell bodies and growing processes including axons. Nuclear localization has also been observed in fetal cells, suggesting additional regulatory functions beyond synaptic activity.