Recombinant KCD12 protein (His tag)

Catalog Number	549870
Synonyms	Pfetin; Predominantly fetal expressed T1 domain
Species	Human
Expression System	E. coli
Accession	Q96CX2
Molecular Weight	Predictes a molecular mass of 15.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	205-325
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 205-325 aa (Q96CX2) 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 KCTD12 (Pfetin) Fragment (aa 205-325) is a highly stable and soluble protein unit derived from the human BTB/POZ domain-containing protein KCTD12. This fragment is specifically designed for structural and biochemical studies, offering researchers a reliable tool to investigate the auxiliary role of KCTD12 in GABA-B receptor signaling and kinetics. The full-length BTB/POZ domain-containing protein KCTD12 (Pfetin) functions as an auxiliary subunit of GABA-B receptors, critically influencing receptor pharmacology and response dynamics. It enhances agonist potency and significantly modulates G-protein signaling by accelerating response onset and promoting desensitization. KCTD12 is localized to both presynaptic and postsynaptic cell membranes, underscoring its importance in neuronal signaling pathways and synaptic transmission.