Recombinant C1QL3 protein (His tag)

Catalog Number	548980
Synonyms	C1q and tumor necrosis factor-related protein 13; C1q/TNF-related protein 13
Species	Human
Expression System	E. coli
Accession	Q5VWW1
Molecular Weight	Predictes a molecular mass of 21.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	63-255
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 63-255 aa (Q5VWW1) 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	This recombinant protein corresponds to a specific fragment (amino acids 63-255) of the human Complement C1q-like protein 3 (C1QL3), designed to encompass the complete C1q functional domain. It is an essential tool for investigating synapse regulation in neurons and glucose metabolism pathways, offering researchers a targeted reagent for domain-specific functional studies. Complement C1q-like protein 3, encoded by the C1QL3 gene, is a secreted protein that plays a critical role in regulating the number of excitatory synapses on hippocampus neurons, without affecting inhibitory synapses. Additionally, it contributes to glucose homeostasis by activating the AMPK signaling pathway, which enhances glucose uptake in adipocytes, myotubes, and hepatocytes and improves insulin-stimulated glucose uptake. In hepatoma cells, it reduces the expression of gluconeogenic enzymes G6PC1 and PCK1, thereby decreasing de novo glucose production. Its secretion into the extracellular space underscores its function in intercellular signaling and metabolic regulation.