Recombinant LRCH4 protein (His tag)

Catalog Number	546540
Synonyms	Leucine-rich repeat neuronal protein 4; Leucine-rich neuronal protein
Species	Human
Expression System	E. coli
Accession	O75427
Molecular Weight	Predictes a molecular mass of 27.27 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	33-264
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 33-264 aa (O75427) 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	Introducing the recombinant human Leucine-rich repeat and calponin homology domain-containing protein 4 (LRCH4) fragment (residues 33-264), a stable and soluble unit ideal for investigating the regulation of innate immune signaling pathways. This 232-amino acid fragment is engineered for structural and biochemical studies, offering researchers a reliable tool to explore TLR signaling mechanisms. Leucine-rich repeat and calponin homology domain-containing protein 4, encoded by the LRCH4 gene, functions as an accessory protein that broadly regulates signaling through multiple Toll-like receptors (TLRs), positioning it as a key modulator of the innate immune response. In macrophages, it binds lipopolysaccharide (LPS) and facilitates its proper docking within lipid raft membranes, potentially contributing to lipid raft maintenance. The full-length protein is localized to the cell membrane as a single-pass membrane protein, underscoring its role in membrane-associated immune signaling processes.