Recombinant CAR17 protein (His tag)

Catalog Number	545181
Synonyms	Caspase-1 inhibitor INCA; Inhibitory caspase recruitment domain protein
Species	Human
Expression System	E. coli
Accession	Q5XLA6
Molecular Weight	Predictes a molecular mass of 13.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	1-110
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-110 aa (Q5XLA6) 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 CARD17P fragment (amino acids 1-110), a high-purity protein encompassing the full caspase recruitment domain (CARD) of human Putative caspase recruitment domain-containing protein 17P. This fragment serves as a powerful tool for investigating the molecular mechanisms of procaspase-1 regulation and inflammasome signaling. The full-length Putative caspase recruitment domain-containing protein 17P (also known as Caspase-1 inhibitor INCA) functions as a key regulator of procaspase-1 (CASP1) activation in humans. It plays a critical role in controlling the proteolytic maturation of pro-IL-1β (IL1B) and its subsequent release during inflammatory responses. Research has demonstrated that this protein inhibits IL1B release in monocytes following LPS stimulation, positioning it as an important modulator of inflammation. Unlike CASP1, however, it does not activate NF-κB signaling pathways. The protein is localized to the cytoplasm, where it exerts its regulatory functions on inflammasome components.