Recombinant PRG3 protein (His tag)

Catalog Number	541601
Synonyms	Eosinophil major basic protein homolog; Prepro-major basic protein homolog; Prepro-MBPH
Species	Human
Expression System	E. coli
Accession	Q9Y2Y8
Molecular Weight	Predictes a molecular mass of 17.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	88-225
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 88-225 aa (Q9Y2Y8) 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 Human Proteoglycan 3 (PRG3) Fragment (aa 88-225) is a high-purity protein designed for studying the C-type lectin domain. This fragment retains key functional activities, including cytotoxic and cytostimulatory properties, making it an essential tool for immunological and cell signaling research. Proteoglycan 3 (PRG3), also known as Eosinophil major basic protein homolog, is a human protein with cytotoxic and cytostimulatory functions similar to PRG2/MBP. It stimulates neutrophil superoxide production and IL8 release, as well as histamine and leukotriene C4 release from basophils, indicating its role in inflammatory and immune responses. The protein is localized to cytoplasmic granules, specifically within eosinophil secondary granules, highlighting its involvement in granule-mediated cellular processes. The recombinant fragment (aa 88-225) encompasses the C-type lectin domain (aa 107-224), enabling focused investigation into domain-specific mechanisms.