Recombinant GROA protein (His tag)

Catalog Number	542071
Synonyms	C-X-C motif chemokine 1; GRO-alpha(1-73); Melanoma growth stimulatory activity; MGSA; Neutrophil-activating protein 3; NAP-3; 4-73; 5-73; 6-73
Species	Human
Expression System	E. coli
Accession	P09341
Molecular Weight	Predictes a molecular mass of 9.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	35-107
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 35-107 aa (P09341) 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 CXCL1 (GRO-alpha(1-73)) Protein Fragment - A highly purified, stable fragment of the Growth-regulated alpha protein (CXCL1) spanning residues 35-107, specifically engineered for structural and biochemical studies of neutrophil chemotactic activity. Growth-regulated alpha protein (CXCL1) is a secreted chemokine with potent chemotactic activity for neutrophils, playing a crucial role in inflammatory processes. The full-length protein exerts autocrine effects on endothelial cells and exists in multiple processed forms. Notably, the N-terminally truncated variants GRO-alpha(4-73), GRO-alpha(5-73), and GRO-alpha(6-73) demonstrate approximately 30-fold higher chemotactic activity compared to the full-length protein, highlighting the importance of the N-terminal region in functional regulation. This recombinant fragment represents a stable, soluble unit ideal for investigating the structural basis of CXCL1-mediated neutrophil activation and inflammatory signaling pathways.