

## Chemokine (C-X-C Motif) Ligand 1 (CXCL1) Active Protein | CXCL1 active protein

Active Chemokine (C-X-C Motif) Ligand 1 (CXCL1)

|                               |                       |                                                     |
|-------------------------------|-----------------------|-----------------------------------------------------|
| CATALOG #<br><b>AAA152237</b> | HOST<br><b>E Coli</b> | APPLICATIONS<br><b>Activity Assay, Cell Culture</b> |
|-------------------------------|-----------------------|-----------------------------------------------------|

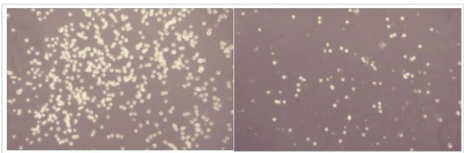
### PRODUCT SYNONYMS

Chemokine (C-X-C Motif) Ligand 1 (CXCL1); Active Chemokine (C-X-C Motif) Ligand 1 (CXCL1); CXCL1/Chemokine (C-X-C Motif) Ligand 1; NAP3; GRO1; GROa; GRO-A; MGSA-A; SCYB1; Chemokine C-X-C-Motif Ligand 1; Melanoma Growth Stimulating Activity Alpha; Fibroblast Secretory Protein; CXCL1 active protein

### PRODUCT SPECIFICATIONS

|                                                  |                                                                                                              |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Host                                             | E Coli                                                                                                       |
| Purity/Purification                              | Greater than 97% by SDS-PAGE                                                                                 |
| Form/Format                                      | PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.<br>Freeze-dried powder               |
| Sequence                                         | Ala25~Lys96                                                                                                  |
| Applicable Applications for CXCL1 active protein | Activity Assay, Cell Culture                                                                                 |
| Species                                          | Mouse                                                                                                        |
| Isoelectric Point                                | 9.3                                                                                                          |
| Tag                                              | N-terminal His Tag                                                                                           |
| Endotoxin Level                                  | <1.0EU per 1ug (determined by the LAL method)                                                                |
| Reconstitution                                   | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0mg/mL. Do not vortex.                          |
| Preparation and Storage                          | Store at 2-8 degree C for one month, -80 degree C for 12 months<br>Stable for 12 months if correctly stored. |

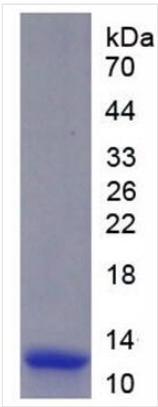
IMAGES



Bioactivity

Neutrophil Activating Protein 3 (NAP3),also known as chemokine (C-X-C motif) ligand 1 (CXCL1) is a small cytokine belonging to the CXC chemokine family. NAP3 plays a role in spinal cord development by inhibiting the migration of oligodendrocyte precursors and is involved in the processes of angiogenesis, arteriogenesis, inflammation, wound healing, and tumorigenesis. Thus, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of NAP3 on the human monocytic cell line THP-1. Briefly, THP-1 cells were seeded into the upper chambers (100uL cell suspension, 5×10<sup>5</sup> cells/ml in RPMI 1640 with FBS free) and recombinant human NAP3 (0.01ng/mL, 0.1ng/mL, 1ng/mL, 10ng/mL, 100ng/mL, 1000ng/mL diluted separately in serum free RPMI 1640) was added in lower chamber with a polycarbonate filter (8um pore size) used to separate the two compartments. After incubation at 37 degree C with 5% CO<sub>2</sub> for 1h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification (×100) and the number of migrated cells were counted at high magnification (×200) randomly (five fields for each filter). Result shows recombinant human NAP3 is able to induce migration of THP-1 cells. The migrated THP-1 cells in low chamber at low magnification(×100) were shown in Figure 1. Five fields of each chamber were randomly chosen, and the migrated cells were counted at high magnification(×200). Statistical results were shown in Figure 2. The optimum chemotaxis of NAP3 occurs at 0.1~1ng/mL.

SDS-PAGE  
SDS-PAGE



ADDITIONAL INFORMATION

|                                                    |                                                                  |
|----------------------------------------------------|------------------------------------------------------------------|
| Product Categories/Family for CXCL1 active protein | Cytokine; Tumor immunity; Infection immunity; Active proteins/AP |
|----------------------------------------------------|------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 6680109                                                                                                                                                                                         |
| NCBI GeneID                      | 14825                                                                                                                                                                                           |
| NCBI Accession #                 | NP_032202.1                                                                                                                                                                                     |
| NCBI GenBank Nucleotide #        | NM_008176.3                                                                                                                                                                                     |
| UniProt Accession #              | P12850                                                                                                                                                                                          |
| Molecular Weight                 | 10,254 Da                                                                                                                                                                                       |
| NCBI Official Full Name          | growth-regulated alpha protein                                                                                                                                                                  |
| NCBI Official Synonym Full Names | chemokine (C-X-C motif) ligand 1                                                                                                                                                                |
| NCBI Official Symbol             | Cxcl1                                                                                                                                                                                           |
| NCBI Official Synonym Symbols    | KC; Fsp; N51; gro; Gro1; Mgsa; Scyb1                                                                                                                                                            |
| NCBI Protein Information         | growth-regulated alpha protein; C-X-C motif chemokine 1; GRO1 oncogene; KC/GR)-alpha; KC/GRO-alpha; alpha-chemokine; platelet-derived growth factor-inducible protein KC; secretory protein N51 |
| UniProt Protein Name             | Growth-regulated alpha protein                                                                                                                                                                  |
| UniProt Gene Name                | Cxcl1                                                                                                                                                                                           |
| UniProt Synonym Gene Names       | Gro; Gro1; Mgsa; Scyb1; HSF                                                                                                                                                                     |
| UniProt Entry Name               | GROA_MOUSE                                                                                                                                                                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

