

# Recombinant Human NAP-2/CXCL7

#### Information

| Gene ID             | 5473  |  |  |
|---------------------|---|--|--|
| Accession #         | P02775  |  |  |
| Alternate Names     | CXCL7, LDGF, MDGF, Small-inducible cytokine B7  |  |  |
| Source              | Escherichia coli.   |  |  |
| M.Wt                | Approximately 7.6 kDa, a single non-glycosylated polypeptide chain containing 70 amino acids.   |  |  |
| AA Sequence         | AELRCMCIKT TSGIHPKNIQ SLEVIGKGTH CNQVEVIATL KDGRKICLDP DAPRIKKIVQ KKLAGDESAD  |  |  |
| Appearance          | Sterile Filtered White lyophilized (freeze-dried) powder.   |  |  |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  - 12 months from date of receipt, -20 to -70 °C as supplied.  - 1 month, 2 to 8 °C under sterile conditions after reconstitution.  - 3 months, -20 to -70 °C under sterile conditions after reconstitution.  |  |  |
| Formulation         | Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 50 mM NaCl.   |  |  |
| Reconstitution      | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions. |  |  |
| Biological Activity | Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human peripheral blood neutrophils is in a concentration range of 1.0-10.0 ng/ml.  |  |  |
| Shipping Condition  | Gel pack.   |  |  |
| Handling            | Centrifuge the vial prior to opening.   |  |  |
| Usage               | For Research Use Only! Not to be used in humans.  |  |  |

## Components and Storage

| Components                    | 10 µg | 100 µg | 500 µg |
|-------------------------------|-------|--------|--------|
| Recombinant Human NAP-2/CXCL7 | 10 µg | 100 µg | 500 µg |

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### Quality Control

| Purity    | > 97 % by SDS-PAGE and HPLC analyses.    | P Land State of the Order |
|-----------|--|---------------------------|
| Endotoxin | Less than 1 EU/μg of rHuNAP-2/CXCL7 as d | etermined by LAL method.  |

#### **Description**

Neutrophil activating protein-2 also named CXCL7 is an isoform of Beta-Thromboglobulin or Pro-Platelet basic protein. It belongs to the CXC chemokine family and is released in large amounts from platelets following their activation. CXCL7 stimulates DNA synthesis, mitosis, glycolysis, intracellular cAMP accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and sulfated glycosaminoglycan. It also stimulates the formation and secretion of plasminogen activator by human synovial cells. Recombinant human CXCL7 contains 70 amino acids which is a single non-glycosylated polypeptide chain. In addition, The human CXCL7 shares 53 % and 58 % a.a. sequence identity with mouse and rat CXCL7.

#### Reference

- 1. Hristov M, Zernecke A, Bidzhekov K, et al. 2007. Circ Res. 100:590-7.
- 2. Majumdar S, Gonder D, Koutsis B, et al. 1991. J Biol Chem. 266:5785-9.
- 3. Krijgsveld J, Zaat SA, Meeldijk J, et al. 2000. J Biol Chem. 275:20374-81.
- 4. Piccardoni P, Evangelista V, Piccoli A, et al. 1996. Thromb Haemost. 76:780-5.

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