

## Recombinant Human Midkine (NEGF2)

Cat No:HR2R1729

For research use only

### Overview

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| Quantity           | 20 ?g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Gene Symbol        | MDK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Gene ID            | 4192                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Accession          | P21741                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Alternative Name   | MK, NEGF-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Species            | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Source             | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Description        | Midkine and its functionally-related protein Pleiotrophin (PTN), are heparin-binding neurotrophic factors that signal through the same receptor. Midkine is involved in a number of biological processes including the migration of neutrophils, inflammatory leukocytes, macrophages, neuronal cells, and osteoclasts. Midkine is a basic, non-glycosylated polypeptide that contains five intra-chain disulfide bonds. There is 87% identity between the human and murine Midkine and approximately 50% identity between human Midkine and human PTN with the conservation of all 10 cysteines. |
| Functions          | The ED(50) was determined by the dose-dependent proliferation of AsPC-1 cells and was found to be <math>0.5\text{ng/mL}</math>.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Formulation        | Lyophilized from a 0.2 ?m filtered solution in PBS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Solubility         | Reconstitute at 0.1 mg/ml in sterile PBS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Appearance         | Lyophilized Powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Molecular Weight   | 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Purity             | >95% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Concentration      | <math>1.0\text{ EU/?g}</math> of recombinant protein as determined by the LAL method.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Shipping Condition | Ambient Temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Storage Condition  | The lyophilized protein is stable for at least one year from date of receipt at $-70^{\circ}\text{C}$ . Upon reconstitution, this cytokine can be stored in working aliquots at $2^{\circ} - 8^{\circ}\text{C}$ for one month, or at $-20^{\circ}\text{C}$ for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.                                                                                                                                                                                                                         |