

Recombinant Human Midkine (MK)

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Rev. 1.00

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|---------------------------------------|---|
| Catalog Number: | PHC7084 |
| Quantity: | 20 µg |
| Lot Number: | See product label. |
| Molecular Weight: | 13.4 kDa, 123 amino acid residues. |
| Purity: | 98% by SDS PAGE and HPLC analyses. |
| Biological Activity: | The biological activity is determined by measuring dose-dependent chemotaxis with human neutrophils. A concentration range of 0.1–10 ng/mL produces significant chemotaxis. Midkine (MK), also known as Neurite Growth Promoting Factor-2 (NEGF-2) is a developmentally regulated protein which promotes neurite extension and neuronal survival. Midkine was originally identified in embryonic stem cells treated with retinoic acid. This protein is normally expressed by mouse fetal astrocytes in mid-gestation, as well as by astrocytomas. Midkine is a member of the heparin-binding neurotrophin family which bears structural homology with Pleiotrophin (PTN). As with Pleiotrophin, Midkine is highly conserved among mammalian species. |
| Formulation: | Lyophilized from 0.4× phosphate buffered saline, pH 7.4. Sterile filtered prior to lyophilization. |
| Endotoxin: | <0.1 ng/µg |
| Production: | Produced in <i>E. coli</i> and purified by sequential chromatography. |
| Reconstitution Recommendation: | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This lyophilized protein should be reconstituted in sterile, distilled water to a concentration of 0.1–1 mg/mL. <i>Do not vortex</i> . This solution can be stored at 2°C to 8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein, such as 0.1% BSA and store in working aliquots at –20°C to –80°C. |
| Suggested Working Dilutions: | The optimal concentration should be determined for each specific application. |
| Storage: | The lyophilized protein is stable at room temperature for 1 month, but should be kept at –20°C for long term storage, preferably desiccated. Working aliquots stored with a carrier protein are stable for at least 3 months at –20°C to –80°C. Avoid repeated freeze/thaw cycles. |
| Expiration Date: | See product label. |

Explanation of Symbols

The symbols present on the product label are explained below:

| Symbol | Description |
|---|---|
|  | Catalog Number |
|  | Research Use Only |
|  | Use by |
|  | Manufacturer |
|  | Without, does not contain |
|  | Protect from light |
|  | Directs the user to consult instructions for use (IFU), accompanying the product. |

| Symbol | Description |
|---|--|
|  | Batch code |
|  | In vitro diagnostic medical device |
|  | Temperature limitation |
|  | European Community authorized representative |
|  | With, contains |
|  | Consult accompanying documents |

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