

**Midkine, murine recombinant protein**  
**MK, NEGF-2**  
**Catalog # PBV10788r****Specification**

---

**Midkine, murine recombinant protein - Product info**

Primary Accession [P12025](#)  
Calculated MW **13.3 kDa KDa**

**Midkine, murine recombinant protein - Additional Info**

Gene ID	<b>17242</b>
Gene Symbol	<b>MDK</b>
<b>Other Names</b>	
MK, NEGF-2	
Gene Source	<b>Murine</b>
Source	<b>E.coli</b>
Assay&Purity	<b>SDS-PAGE; ≥98%</b>
Assay2&Purity2	<b>HPLC;</b>
Recombinant	<b>Yes</b>
Sequence	<b>VAKKKEKVKK GSECSEWTWG PCTPSSKDCG MGFREGTCGA QTQRVHCKVP CNWKKEFGAD CKYKFESWGA CDGSTGTKAR QGTLKKARYN AQCQETIRVT KPCTSKTKSK TKAKKGKGKD</b>

**Target/Specificity**  
Midkine

**Application Notes**

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

**Format**

Lyophilized powder

**Storage**

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 0.4 x PBS, pH 7.4.

**Midkine, murine recombinant protein - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Midkine, murine recombinant protein - Images****Midkine, murine recombinant protein - Background**

Midkine and its functionally-related protein Pleiotrophin are heparin-binding neurotrophic factors that signal through the same receptor, known as anaplastic lymphoma kinase (ALK). MK plays an important regulatory role in epithelial-mesenchymal interactions during fetal development and in postnatal lung development. MK chemoattracts embryonic neurons, neutrophils and macrophages, and by signaling through the ALK receptor it exerts angiogenic, growth and survival activities during tumorigenesis. Recombinant murine Midkine is a 13.3 kDa protein containing 120 amino acid residues including five intra-molecular disulfide bonds.

**Midkine, murine recombinant protein - References**

Matsubara S., et al. J. Biol. Chem. 265:9441-9443(1990).  
Tomomura M., et al. J. Biol. Chem. 265:10765-10770(1990).  
Kadomatsu K., et al. Biochem. Biophys. Res. Commun. 151:1312-1318(1988).  
Kaneda N., et al. J. Biochem. 119:1150-1156(1996).  
Horiba M., et al. J. Clin. Invest. 105:489-495(2000).