9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

Midkine Rat

Midkine Rat Recombinant
NTR0042

Product Overview

Name	Midkine Rat
Description	
Midkine Rat Recombinant	
Accession (Primary)	Q9R1S9
Synonyms	
Midkine, MK, Mdk.	

Introduction

Midkine (MK) is the product of a retinoic acid responsive gene, MK, and is a member of a family of heparin binding factors. It contains 121 amino acid residues including 10 conserved cysteine residues, all of which appear to be disulphide linked. Midkine is expressed during embryogenesis, showing an expression pattern that suggests functions in neurogenesis, cell migration, secondary organogenetic induction, and mesoderm-epithelial interaction. The widespread downregulation of MK in the adult human is reverted in a number of cancers, in which polypeptides are able to act as both transforming growth factors and promoters of angiogenesis. Midkine (MK), induces chemotaxis of human neutrophils and was found to trigger mobilization of intracellular calcium of these cells. Midkine induces histamine release from rat peritoneal mast cells with a rapid response in a dose dependent manner. Midkine is also a potent stimulator of collagen and glycosaminoglycan synthesis.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 μm filtered concentrated solution in 1xPBS, pH 7.4.

Stability

Lyophilized Midkine Rat although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Midkine Rat should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

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Amino acid sequence

VAKKKDKVKK GSECSEWTWG PCTPSSKDCG MGFREGTCGA QTQRIHCKVP CNWKKEFGAD CKYKFESWGA CDGSTGTKAR QGTLKKARYN AQCQETIRVT KPCTSKTKSK AKAKKGKGKD.

Biological Activity

The biological activity determined by a chemotaxis bioassay using human neutrophils is in a concentration range of 10-100 ng/ml.

Solubility

It is recommended to reconstitute the lyophilized Midkine Rat in sterile 18M-cm H 2 O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

Midkine Rat is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q9R1S9)