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

Midkine Human

Midkine Human Recombinant
NTR0039

Product Overview

Name	Midkine Human
Description	
Midkine Human Recombinant	
Accession (Primary)	P21741
Synonyms	
NEGF-2, Neurite Growth-Promoting Factor 2, MK, Neurite outgrowth-promoting protein, Midgestation and kidney protein, Amphiregulin-associated protein, ARAP, Neurite outgrowth-promoting factor 2, FLJ27379, Midkine, MK1, NEGF2.	
Introduction	
Midkine (MK) is the product of a retinoic acid responsive gene. 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 1×PBS, pH 7.4.	
Stability	
Lyophilized Midkine although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Midkine should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	

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Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

VAKKKDKVKK GGPGSECAEW AWGPCTPSSK DCGVGFREGT CGAQTQRIRC RVPCNWKKEF GADCKYKFEN WGACDGGTGT KVRQGTLKKA RYNAQCQETI RVTKPCTPKT KAKAKAKKGK GKD.

Biological Activity

Determined by its ability to chemoattract human neutrophils using a concentration range of 0.1-10 ng/ml corresponding to a specific activity of 100,000-10,000,000IU/mg.

Solubility

It is recommended to reconstitute the lyophilized Midkine 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 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P21741)