

TECHNICAL DATA SHEET

Recombinant Human Midkine (Carrier-free)

Catalog Number: 21-7112

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human Midkine (Carrier-free)

DESCRIPTION

Midkine, also known as neurite growth-promoting factor 2, is a heparin-binding nonglycosylated low molecular weight protein. It is expressed in a variety of cell types during embryogenesis, and has functions related to cell growth, migration and angiogenesis. Midkine signals through the anaplastic lymphoma kinase (ALK) receptor which stimulates phosphorylation and kinase activation events and results in cell proliferation.

MOLECULAR MASS

Recombinant Human Midkine consists of 123 amino acid residues including five intra-molecular disulfide bonds, and has a molecular weight of 13.4 kDa.

AMINO ACID SEQUENCE

VAKKKDKVKK GPGSECAEW AWGPCTPSSK DCGVGFREGT CGAQTQRIRC RVPCNWKKEF GADCKYKFEN WGACDGGTGT
KVRQGTLLKA RYNAQCQETI RVTKPCTPKT KAKAKAKKGGK GKD

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Bacteria, Mouse, Pig, Shark, Squid

BIOACTIVITY

Within a concentration range of 0.1-10.0 ng/ml, the ability to chemoattract human neutrophils is measured.

RESEARCH AREAS

Angiogenesis & Cardiovascular, Neurobiology

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Böhlen P and Kovesdi I. 1991. Prog Growth Factor Res. 3(2): 143-157. Muramatsu T. 1993. Int. J Dev Biol. 37: 183-188. Muramatsu H, Shirahama H, Yonezawa S, Maruta H and Muramatsu T. 1993. Dev Biol. 159(2): 392-402. Muramatsu T. 2002. J Biochem. 132(3): 359-371.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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