

MDK

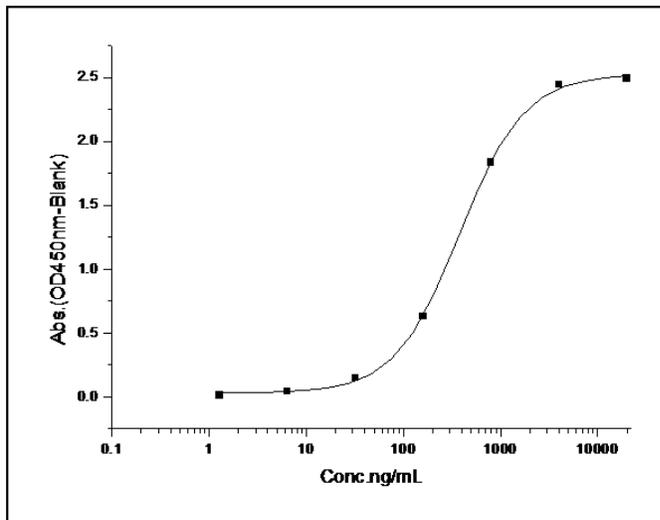
Recombinant Human Midkine / MDK

Catalog No.	CRH426A CRH426B	Quantity:	10 µg 20 µg
Alternate Names:	Midkine1, MK1, Amphiregulin-associated protein, ARAP, Midgestation and kidney protein, Neurite outgrowth-promoting factor 2, Neurite outgrowth-promoting protein		
Description:	Midkine (MK or MDK) also known as neurite growth-promoting factor 2 (NEGF2) is a basic heparin-binding growth factor of low molecular weight, and forms a family with pleiotrophin. Midkine is a retinoic acid-responsive, heparin-binding growth factor expressed in various cell types during embryogenesis. It promotes angiogenesis, cell growth, and cell migration. Midkine is also expressed in several carcinomas, suggesting that it may play a role in tumorigenesis, perhaps through its effects on angiogenesis. Midkine binds anaplastic lymphoma kinase (ALK) which induces ALK activation and subsequent phosphorylation of the insulin receptor substrate (IRS1), followed by the activation of mitogen-activated protein kinase (MAPK) and PI3-kinase, and the induction of cell proliferation. Midkine is involved in neointima formation after arterial injury, possibly by mediating leukocyte recruitment. Also involved in early fetal adrenal gland development. Midkine exhibited increased expression in the breast carcinomas but showed much lower expression in the normal breast tissue. Thus, it can be used as breast carcinomas marker.		
UniProt ID:	P21741		
Protein Construction:	A DNA sequence encoding the human MDK (Met 1-Asp 143) was expressed and purified.		
Source:	Baculovirus-Insect Cells		
Molecular Weight:	The secreted recombinant human MDK consists of 123 amino acids and predicts a molecular mass of 13.4 kDa. It migrates as an approximately 18 kDa band in SDS-PAGE under reducing conditions.		
Formulation:	Lyophilized from sterile 50mM PBS, 1 M NaCl, pH 6.8 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Purity:	> 95 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method		
Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized human MDK at 10 µg/ml (100 µl/well) can bind mouse SDC4-Fc with a linear range of 0.16-1.25 µg/ml.		
Predicted N-terminal:	Val 21		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution.		

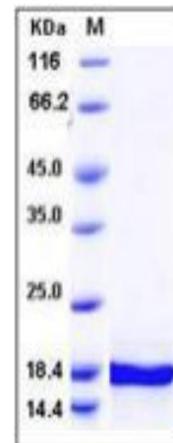


Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

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SDS-PAGE



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.