## For Research Use Only

## Midkine Polyclonal antibody Catalog Number: 11009-1-AP Featured Product 13

Featured Product 13 Publications



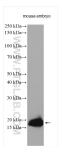
| Basic Information   | Catalog Number:<br>11009-1-AP   | GenBank Accession Number:<br>BC011704  | Purification Method:<br>Antigen affinity purification   |  |
|---|---|--|---|--|
|   | Size:<br>150ul, Concentration: 450 ug/ml by<br>Nanodrop;<br>Source:<br>Rabbit<br>Isotype:<br>IgG<br>Immunogen Catalog Number:<br>AG1465   | GeneID (NCBI):<br>4192<br>UNIPROT ID:<br>P21741<br>Full Name:<br>midkine (neurite growth-pron<br>factor 2)<br>Calculated MW:<br>16 kDa<br>Observed MW:<br>16 kDa | Recommended Dilutions:<br>WB 1:500-1:1000<br>IP 0.5-4.0 ug for 1.0-3.0 mg of total<br>protein lysate<br>IHC 1:50-1:500<br>IF/ICC 1:50-1:500 |  |
| Applications  | Tested Applications:  | Positive Controls:   |   |  |
|   | Cited Applications:cellsWB, IHC, IFIP : mouse eSpecies Specificity:IHC : humanhuman, mouseIHC : human   |  | se embryo tissue, COLO 320 cells, SH-SY5Y   |  |
|   |   |  | use embryo tissue,<br>uman intrahepatic cholangiocarcinoma tissue,  |  |
|   | Cited Species:<br>human, mouse, rat   |  | : HeLa cells,   |  |
|   | Note-IHC: suggested antigen<br>TE buffer pH 9.0; (*) Alternati<br>retrieval may be performed w<br>buffer pH 6.0   | vely, antigen  |   |  |
| Background Information  | Midkine is a heparin-binding growth factor identified over 20 years ago and enhances the survival, migration and many other activities of target cells. Midkine is rich in both basic amino acids and cysteine, and is not related to most other growth factors/cytokines. It is strongly expressed during embryonic periods, especially at the midgestation stage, and plays important roles in development, especially in neurogenesis. Midkine expression in adult tissue is generally weak or undetectable, and it is induced upon injury and exerts many activities related to tissue repair. The biological activities of midkine in malignant tumors include proliferation, angiogenesis, invasion and metastasis. Various cancers express significantly higher levels of the midkine protein in early stage tumor tissues than in adjacent normal tissue. |  |   |  |
| Notable Publications  | Author Pu   | bmed ID Journal  | Application   |  |
|   | Beiquan Hu 34   | 556138 Cancer Cell II  | nt WB   |  |
|   | Federica Morani 33  | 800494 Int J Mol Sci   | WB  |  |
|   | Luyu Zheng 35   | 747815 Front Oncol   | WB  |  |
| Storage   | Storage:<br>Store at -20°C. Stable for one year af<br>Storage Buffer:<br>PBS with 0.02% sodium azide and 50<br>Aliquoting is unnecessary for -20°C s  | 9% glycerol pH 7.3.  |   |  |
| *** 20ul sizes contain 0.1% BSA   |   |  |   |  |
| For technical support and original validation dat<br>T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free | ta for this product please contact:<br>E: proteintech@ptglab.com  |  | luct is exclusively available under Proteintec<br>and and is not available to purchase from any   |  |

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

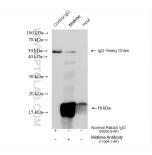
E: proteintech@ptglab.com W: ptglab.com

Group brand and is not available to purchase from any other manufacturer.

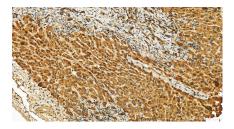
## Selected Validation Data



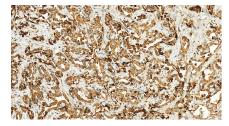
Mouse embryo tissue were subjected to SDS PAGE followed by western blot with 11009-1-AP (Midkine antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



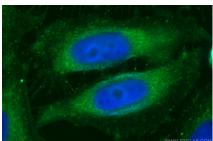
IP result of anti-Midkine (IP:11009-1-AP, 4ug; Detection:11009-1-AP 1:3000) with mouse embryo tissue lysate 4800 ug.



Immunohistochemical analysis of paraffinembedded human intrahepatic cholangiocarcinoma tissue slide using 11009-1-AP (Midkine antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human intrahepatic cholangiocarcinoma tissue slide using 11009-1-AP (Midkine antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using Midkine antibody (11009-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).