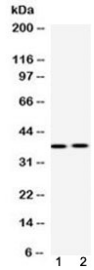
HDGF Antibody / PWWP Domain Growth Factor Antibody (R32600)

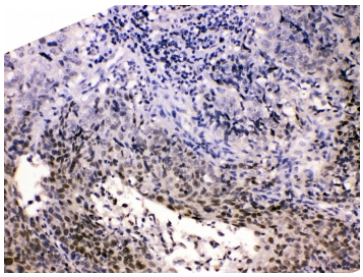
Catalog No.	Formulation	Size
R32600	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

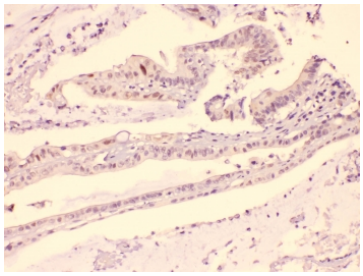
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P51858
Localization	Nuclear, cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Immunofluorescence (FFPE): 2-4ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This HDGF Antibody / PWWP Domain Growth Factor Antibody is available for research use only.



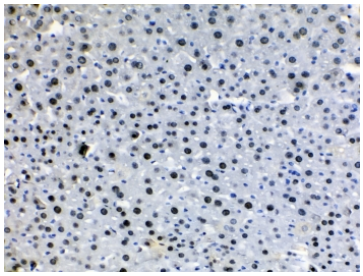
HDGF Antibody in Rat Liver and Human 22Rv1 Prostate Cancer Cells WB. Western blot testing of HDGF Antibody / PWWP Domain Growth Factor Antibody at 0.5 ug/ml in 1) rat liver tissue and 2) human 22Rv1 prostate carcinoma cell lysates. A strong, discrete band is observed at approximately 38 kDa in both samples. Although HDGF has a calculated molecular weight of approximately 27 kDa, endogenous HDGF is well documented to migrate at approximately 37-42 kDa by SDS-PAGE.



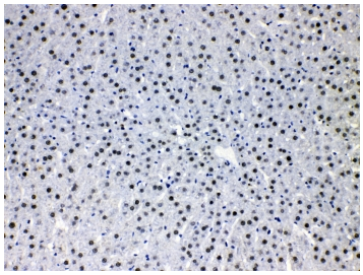
HDGF Antibody in Human Lung Carcinoma IHC. Immunohistochemistry testing of HDGF Antibody / PWWP Domain Growth Factor Antibody at 1 ug/ml in FFPE human lung carcinoma tissue. Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 min. Prominent nuclear immunoreactivity is observed in populations of tumor cells, consistent with the nuclear localization and chromatin-associated functions of HDGF.



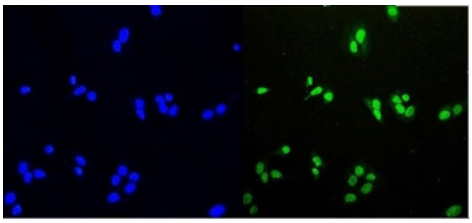
HDGF Antibody in Human Intestinal Carcinoma IHC. Immunohistochemistry testing of HDGF Antibody / PWWP Domain Growth Factor Antibody at 1 ug/ml in FFPE human intestinal carcinoma tissue. Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 min. Nuclear HDGF immunoreactivity is observed in epithelial cells within the tested carcinoma tissue.



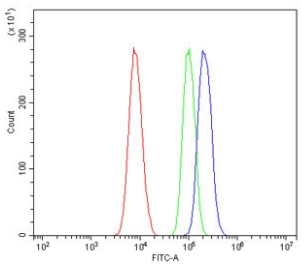
HDGF Antibody in Mouse Liver IHC. Immunohistochemistry testing of HDGF Antibody / PWWP Domain Growth Factor Antibody at 1 ug/ml in FFPE mouse liver tissue. Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 min. Distinct nuclear immunoreactivity is observed in hepatocytes throughout the tested tissue, consistent with the nuclear localization of HDGF.



HDGF Antibody in Rat Liver IHC. Immunohistochemistry testing of HDGF Antibody / PWWP Domain Growth Factor Antibody at 1 ug/ml in FFPE rat liver tissue. Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 min. Widespread nuclear immunoreactivity is observed in hepatocytes, demonstrating the expected nuclear distribution of HDGF.



HDGF Antibody in Human U-2 OS Osteosarcoma Cells IF. Immunofluorescence testing of FFPE human U-2 OS osteosarcoma cells with HDGF Antibody / PWWP Domain Growth Factor Antibody (green). Heat-induced epitope retrieval was performed by steaming in pH 6 citrate buffer for 20 min. Strong HDGF immunoreactivity is concentrated in the nuclei, consistent with the nuclear localization of this PWWP domain-containing growth factor. Nuclei are counterstained with DAPI (blue).



HDGF Antibody in Human A431 Epidermoid Carcinoma Cells FACS. Flow cytometry testing of human A431 epidermoid carcinoma cells with HDGF Antibody / PWWP Domain Growth Factor Antibody at 1 ug/million cells following blocking with goat serum. Cells alone are shown in red, the isotype control in green and HDGF antibody staining in blue. A clear fluorescence shift is observed relative to both controls, demonstrating detection of HDGF in the tested cells.

Description

HDGF Antibody / PWWP Domain Growth Factor Antibody recognizes hepatoma-derived growth factor, a multifunctional

protein encoded by the HDGF gene. HDGF was originally identified as a secreted mitogenic factor but is also prominently localized to the nucleus, where it has DNA-binding and transcriptional regulatory activities. The protein is associated with cellular proliferation and differentiation and has been studied in developmental biology, cardiovascular biology and cancer.

A defining structural feature of HDGF is its highly conserved N-terminal PWWP domain. PWWP domains occur in numerous chromatin-associated proteins and participate in interactions with nucleic acids and chromatin. In HDGF, the N-terminal PWWP domain is required for DNA binding, and experimental studies have demonstrated direct binding of HDGF to promoter DNA. These properties provide an important molecular connection between HDGF nuclear localization, chromatin association and transcriptional regulation.

HDGF also exhibits mitogenic activity and has been implicated in regulation of cell growth, migration and differentiation. Increased HDGF expression has been reported in multiple malignancies and investigated in relation to tumor growth, invasion and disease progression. Its combination of growth-promoting and nuclear regulatory activities has therefore made HDGF an important target in studies of cancer biology and mechanisms controlling cellular proliferation.

This rabbit polyclonal antibody was generated against amino acids 61-97 of human HDGF and purified by antigen affinity chromatography. It recognizes human, mouse and rat HDGF. NSJ Bioreagents provides this HDGF Antibody for research into HDGF expression, cellular proliferation and nuclear regulatory mechanisms. A PWWP Domain Growth Factor Antibody can support studies examining the relationship between HDGF, DNA binding and chromatin-associated regulation.

Explore our Cancer Marker Antibodies page for additional reagents targeting proteins associated with tumor growth, proliferation and cancer progression.

Application Notes

Optimal dilution of the HDGF Antibody / PWWP Domain Growth Factor Antibody should be determined by the researcher.

Immunogen

Amino acids 61-97 (KDLFPYEESKEKFGKPNKRKGFSEGLWEIENNPTVKA-human) were used as the immunogen for the HDGF antibody.

Storage

After reconstitution, the HDGF antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

HDGF antibody, hepatoma-derived growth factor antibody, hepatoma derived growth factor antibody, HMG-1L2 antibody, high mobility group protein 1-like 2 antibody

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