abcam

ab248221

Anti-HDGF antibody [EPR7898] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR7898
Purification technique	Affinity purification Protein A
Concentration	0.982 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information HDGF

Function	Isoform 1. Acts as a transcriptional repressor (PubMed:17974029). Has mitogenic activity for fibroblasts (PubMed:11751870, PubMed:26845719). Heparin-binding protein (PubMed:15491618). Isoform 2. Does not have mitogenic activity for fibroblasts (PubMed:26845719). Does not bind heparin (PubMed:26845719). Isoform 3. Has mitogenic activity for fibroblasts (PubMed:26845719). Heparin-binding protein (PubMed:26845719).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab248221 is the carrier-free version of ab128921.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The Hepatoma-Derived Growth Factor commonly referred to as HDGF or HDGF protein (UniProt ID: K562) operates as a heparin-binding protein with a mass of about 26 kDa. It plays a significant role in cell growth regulation and development processes. HDGF is expressed in the liver and various other tissues including the heart and lungs. It contains an N-terminal PWWP domain which is important for its binding properties and influences its interaction with other molecules.
Biological function summary	HDGF affects cellular processes such as proliferation and differentiation. It does not function as part of a larger protein complex but is known to modulate transcriptional activities within the cell. HDGF's mitogenic properties suggest it can promote tumor progression by influencing the cell's growth and survival mechanisms indicating its involvement in oncogenic pathways.
Pathways	HDGF is integrated into important signaling networks such as the MAPK/ERK pathway. This pathway is important for transmitting signals from the cell surface to the DNA in the cell nucleus affecting cell division and fate. HDGF interacts with proteins in the pathways such as ERK1/2 which are critical regulators of cellular responses. HDGF’s involvement in these pathways indicates its role in mediating cell growth signals and adjusting the cellular response to environmental changes.
Associated diseases and disorders	HDGF has associations with cancer progression including hepatocellular carcinoma and lung cancer. Its overexpression correlates with poor prognosis in these malignancies due to its role in enhancing tumor cell proliferation and resistance to apoptosis. HDGF's relationship with disease involves its potential interaction with oncogenic proteins like Ras which can activate downstream signaling cascades contributing to tumorigenesis. Understanding HDGF's role in disease can further research into targeted therapies aimed at mitigating its effects on cancer progression.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

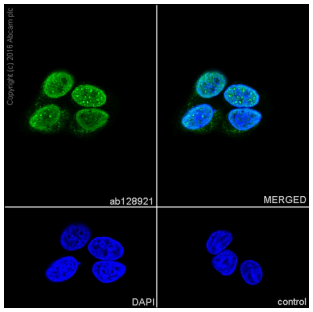
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

5 product images

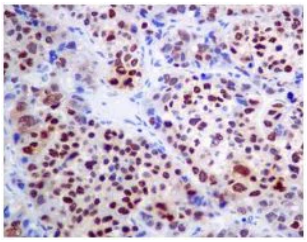


Immunocytochemistry/ Immunofluorescence - Anti-HDGF antibody [EPR7898] - BSA and Azide free (ab248221)

HDGF Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-HDGF antibody

This data was developed using ab128921, the same antibody clone in a different buffer formulation.
ab128921 staining HDGF in MCF-7 (human breast carcinoma) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% PFA and permeabilized with 0.1% triton X-100. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a dilution of 1/1000.

DAPI was used as a nuclear counterstain and the negative control was PBS only.

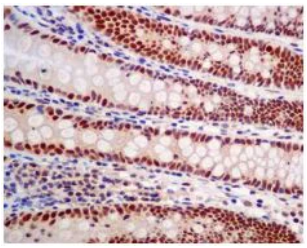


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDGF antibody [EPR7898] - BSA and Azide free (ab248221)

HDGF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-HDGF antibody

This data was developed using ab128921, the same antibody clone in a different buffer formulation.
ab128921, at a 1/100 dilution, staining HDGF in paraffin embedded Human hepatocellular carcinoma tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

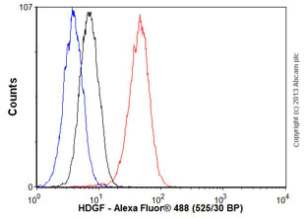


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDGF antibody [EPR7898] - BSA and Azide free (ab248221)

HDGF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-HDGF antibody

This data was developed using ab128921, the same antibody clone in a different buffer formulation.
ab128921, at a 1/100 dilution, staining HDGF in paraffin embedded Human colon tissue by Immunohistochemistry.

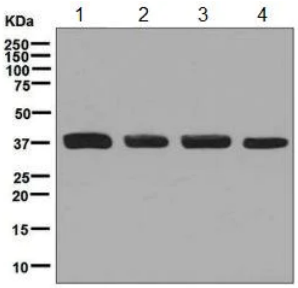
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-HDGF antibody [EPR7898] - BSA and Azide free (ab248221)

HDGF Flow Cytometry (Intracellular) staining using rabbit Anti-HDGF antibody

This data was developed using ab128921, the same antibody clone in a different buffer formulation.
Overlay histogram showing HeLa cells stained with ab128921 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab128921, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-HDGF antibody [EPR7898] - BSA and Azide free (ab248221)

This data was developed using ab128921, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-HDGF antibody [EPR7898] (ab128921) at 1/1000 dilution

Lane 1:
HeLa cell lysate at 10 µg

Lane 2:
A549 cell lysate at 10 µg

Lane 3:
SKBR-3 cell lysate at 10 µg

Lane 4:
ECV-304 cell lysate at 10 µg

Secondary

All lanes:
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 27 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.