abcam

ab131046

Anti-HDGF antibody [EPR7899]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR7899
Purification technique	Affinity purification Protein A
Concentration	0.108 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/250 - 1/500
Notes	-

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/250 - 1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/1000
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

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	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

Notes

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.

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

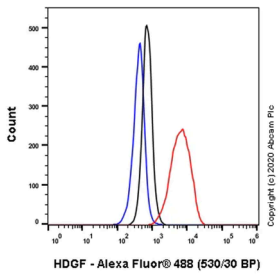
We do not recommend this combination. It is not covered by our product promise.

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.

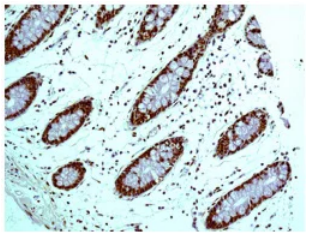
4 product images



Flow Cytometry (Intracellular) - Anti-HDGF antibody [EPR7899] (ab131046)

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

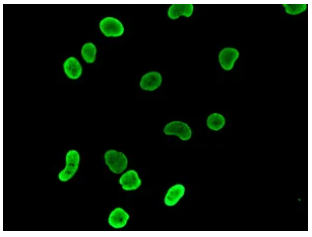
Flow Cytometry analysis of A549 (Human lung carcinoma epithelial cell) cells labeling HDGF with purified ab131046 at 1/1000 dilution (1 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDGF antibody [EPR7899] (ab131046)

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

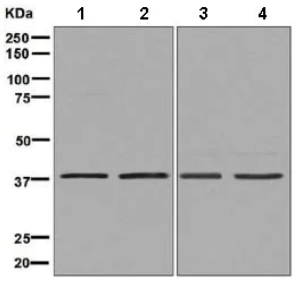
Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling HDGF with ab131046 antibody at 1/250 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-HDGF antibody [EPR7899] (ab131046)

HDGF Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-HDGF antibody

Immunofluorescence analysis of A549 cells labelling HDGF with ab131046 antibody at 1/250 dilution.



Western blot - Anti-HDGF antibody [EPR7899] (ab131046)

All lanes:
Western blot - Anti-HDGF antibody [EPR7899] (ab131046) at 1/10000 dilution

Lane 1:
A549 cell lysate at 10 µg

Lane 2:
Saos-2 cell lysate at 10 µg

Lane 3:
ECV-304 cell lysate at 10 µg

Lane 4:
293T (Human embryonic kidney epithelial cell) cell lysate at 10 µg

Secondary

All lanes:

HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 27 kDa

Observed band size: 40 kDa

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