abcam

ab305033

Anti-CTGF antibody [EPR26521-6]

Recombinant | RabMAb | 20ul selling size

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	EPR26521-6
Purification technique	Affinity purification Protein A
Concentration	0.468 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Dot

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information CCN2

Function Major connective tissue mitoattractant secreted by vascular endothelial cells. Promotes proliferation and differentiation of chondrocytes. Is involved in the stimulation of osteoblast differentiation and has a critical role in osteogenesis (PubMed:39414788). Mediates heparin- and divalent cation-dependent cell adhesion in many cell types including fibroblasts, myofibroblasts, endothelial and epithelial cells. Enhances fibroblast growth factor-induced DNA synthesis.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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	CTGF also known as Connective Tissue Growth Factor is a significant protein in the CCN family involved in regulating various cellular functions. CTGF has a molecular weight of approximately 36-38 kDa. It is highly expressed in tissues such as the skin kidney and vascular tissues. This protein is secreted and can be found in the extracellular matrix where it interacts with other cellular components to mediate its effects.
Biological function summary	Connective Tissue Growth Factor plays an important role in cell adhesion proliferation and differentiation. It operates as an independent protein but can also be part of the extracellular matrix structure. CTGF functions as a mediator in the interaction between cells and their surrounding environment influencing processes such as angiogenesis and wound healing through these interactions.

Pathways	CTGF fits into the TGF-beta and Wnt signaling pathways where it helps modulate cellular responses to external stimuli. It interacts with proteins like fibronectin and integrins within these pathways enhancing cellular communication and response. These pathways are fundamental for both development and pathological conditions showing CTGF's influence on various biological processes.
Associated diseases and disorders	CTGF shows a strong connection with fibrosis and cancer. In fibrotic conditions the CTGF protein interacts with collagen and fibronectin leading to excessive deposition in tissues. In cancers CTGF may promote tumor progression by facilitating angiogenesis and promoting invasive behaviors in tumors. These interactions highlight CTGF's role as a target for therapeutic strategies aimed at treating these diseases.

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

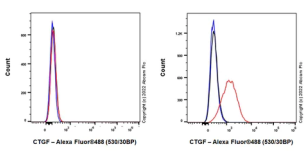
We do not recommend this combination. It is not covered by our product promise.

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.

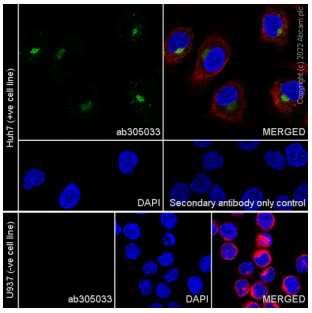
5 product images



Flow Cytometry (Intracellular) - Anti-CTGF antibody [EPR26521-6] (ab305033)

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

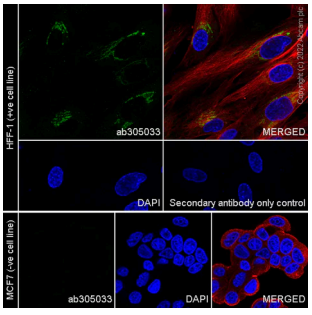
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized MCF7 (human breast adenocarcinoma epithelial cell, Left) / Huh7 (human hepatocellular carcinoma epithelial cell, Right) cells labelling CTGF with ab305033 at 1/50 dilution (1ug) (Red) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody. Negative control: MCF7 (PMID: 10601320).



Immunocytochemistry/ Immunofluorescence - Anti-CTGF antibody [EPR26521-6] (ab305033)

CTGF Immunocytochemistry/ Immunofluorescence staining of Huh7 (human hepatocellular carcinoma epithelial cell) using rabbit Anti-CTGF antibody

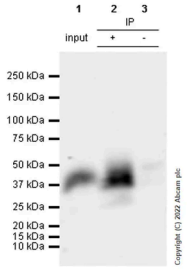
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Huh7 (human hepatocellular carcinoma epithelial cell) cells labelling CTGF with ab305033 at 1/100 (4.68 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing cytoplasmic staining in Huh7 cell line. Negative control: U937 (predicted expression pattern from proteinatlas).Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Immunocytochemistry/ Immunofluorescence - Anti-CTGF antibody [EPR26521-6] (ab305033)

CTGF Immunocytochemistry/ Immunofluorescence staining of HFF-1 (human skin fibroblast) using rabbit Anti-CTGF antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HFF-1 (human skin fibroblast) cells labelling CTGF with ab305033 at 1/100 (4.68 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing cytoplasmic staining in HFF-1 cell line. Negative control: MCF7 (PMID: 10601320).Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Immunoprecipitation - Anti-CTGF antibody [EPR26521-6] (ab305033)

CTGF was immunoprecipitated from 0.35 mg Huh7 (human hepatocellular carcinoma epithelial cell), whole cell lysate 10 ug with ab305033 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab305033 at 1/1000 dilution. VeriBlot for IP secondary antibody (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: Huh7 (human hepatocellular carcinoma epithelial cell), whole cell lysate 10 ug

Lane 2: ab305033 IP in Huh7 whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab305033 in Huh7 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 41 seconds

The IP experiment was performed by ab305033 (YCA-R26521-3 HT H1L1 31101022205) (capture antibody), and band detected by another anti-CTGF antibody (ab209780)

ab305033 recognizes the native form of CTGF and is able to pull down and enrich the target protein.
All lanes:
Immunoprecipitation - Anti-CTGF antibody [EPR26521-6] (ab305033) at 1/30 dilution

Lane 1:
Huh7 (human hepatocellular carcinoma epithelial cell), whole cell lysate 10 ug

Lane 2:
ab305033 IP in Huh7 whole cell lysate

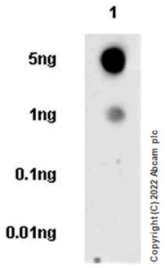
Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Predicted band size: 38 kDa

Observed band size: 38 kDa

Exposure time: 41s



Dot Blot - Anti-CTGF antibody [EPR26521-6] (ab305033)

CTGF Dot Blot staining of CTGF using rabbit Anti-CTGF antibody

Dot blot analysis of CTGF using ab305033 at 1:1000 (0.468 ug/ml) followed by a Goat Anti-Rabbit IgG (H+L) Peroxidase conjugated (ab97051) at 1:100000 dilution. Exposure time: 3 minutesBlocking and diluting buffer and concentration: 5% NFDM/TBST

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