

Anti-CTGF antibody [EPR20728] - BSA and Azide free ab231824

Recombinant RabMAb

[2 References](#) [4 Images](#)

Overview

Product name	Anti-CTGF antibody [EPR20728] - BSA and Azide free
Description	Rabbit monoclonal [EPR20728] to CTGF - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IP, WB
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Starved NIH/3T3 cells treated with TGF- β 1 and Heparin sodium salt whole cell lysate. HepG2 whole cell lysate.
General notes	<p>ab231824 is the carrier-free version of ab209780.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20728
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab231824 in the following tested applications.

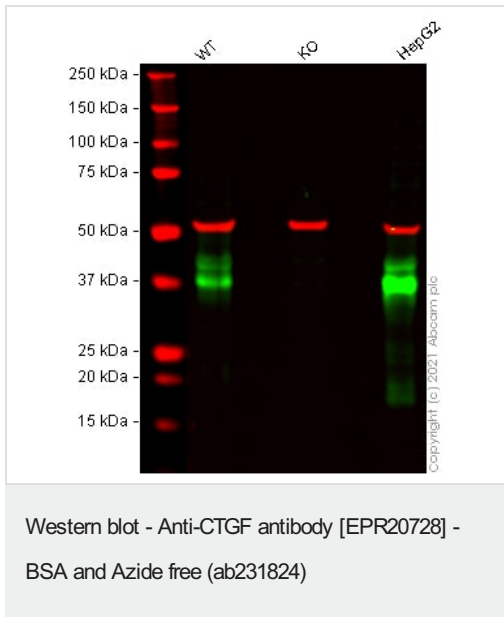
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 38 kDa.

Target

Function	Major connective tissue mitogen secreted by vascular endothelial cells. Promotes proliferation and differentiation of chondrocytes. 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.
Tissue specificity	Expressed in bone marrow and thymic cells. Also expressed one of two Wilms tumors tested.
Sequence similarities	Belongs to the CCN family. Contains 1 CTCK (C-terminal cystine knot-like) domain. Contains 1 IGFBP N-terminal domain. Contains 1 TSP type-1 domain. Contains 1 VWFC domain.
Cellular localization	Secreted > extracellular space > extracellular matrix. Secreted.

Images



All lanes : Anti-CTGF antibody [EPR20728] ([ab209780](#)) at 1/1000 dilution

Lane 1 : Wild-type U-2 OS cell lysate at 20 µg

Lanes 2 & 4 : Empty

Lane 3 : CTGF knockout U-2 OS cell lysate at 20 µg

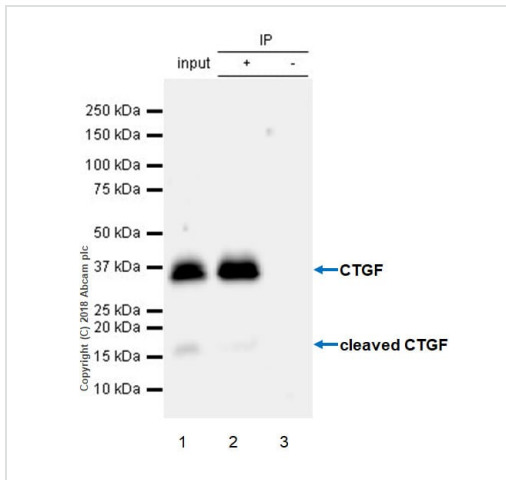
Lane 5 : HepG2 cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 38 kDa

Observed band size: 38 kDa

False colour image of Western blot: Anti-CTGF antibody [EPR20728] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, [ab209780](#) was shown to bind specifically to CTGF. A band was observed at 38 kDa in wild-type U-2 OS cell lysates with no signal observed at this size in CTGF knockout cell line [ab261880](#) (knockout cell lysate [ab261689](#)). To generate this image, wild-type and CTGF knockout U-2 OS cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Immunoprecipitation - Anti-CTGF antibody [EPR20728] - BSA and Azide free (ab231824)

CTGF was immunoprecipitated from 0.35 mg HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate with **ab209780** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab209780** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

Lane 1: HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate 10 µg (Input).

Lane 2: **ab209780** IP in HepG2 whole cell lysate (+).

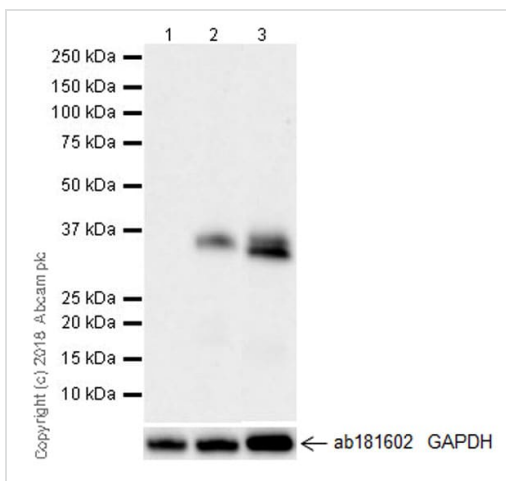
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab209780** in HepG2 whole cell lysate (-).

Blocking and dilution buffer and concentration: 5% NFD/MTBST.

Exposure time: 3 minutes.

The molecular mass observed is consistent with the literature. (PMID:27126736)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab209780**).



Western blot - Anti-CTGF antibody [EPR20728] - BSA and Azide free (ab231824)

All lanes : Anti-CTGF antibody [EPR20728] (**ab209780**) at 1/1000 dilution

Lane 1 : NIH/3T3 (mouse embryonic fibroblast) starved for 18 hours, whole cell lysate

Lane 2 : NIH/3T3 starved for 18 hours, then treated with 10 ng/ml transforming growth factor-β (TGF-β1, **ab50036**) and 50 µg/ml Heparin sodium salt for 24 hours, whole cell lysate

Lane 3 : HepG2 (human hepatocellular carcinoma epithelial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 38 kDa

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

The level of CTGF expression can be induced by TGF β treatment (PMID: 17786299).

CTGF is constitutively expressed in HepG2 cells (PMID:15886528).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab209780**).

Why choose a recombinant antibody?



- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

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Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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