



Anti-CTGF, Rabbit-Polyclonal Antibody

Catalog No. GB-10520
Antigen species: Human
Host species: Rabbit

Quantity: 100 μ g
Reactivity: Human
Form: Protein A affinity purified antibody

Applications tested: ELISA, Western blot

Target description

Connective Tissue Growth Factor (CTGF) is a member of the CCN family of proteins, which regulates biological processes including stimulation of cell proliferation, migration and adhesion. The N-terminal domain of CTGF mediates myofibroblast differentiation and collagen synthesis. The C-terminal domain of CTGF mediates fibroblast proliferation. Although multiple target cell types have been identified for CCN proteins, there is strong evidence supporting a role for CTGF and CYR61 in the regulation of endothelial cell function and angiogenesis. The expression pattern of CTGF and CYR61 in endothelial cells of vessels in situ supports a role for these molecules in normal endothelial homeostasis, as well as participating in the angiogenic process during embryonic development, placentalization, tumor formation, fibrosis and wound healing.

Antigen

This polyclonal antibody was raised by immunizing rabbit with E. coli derived CTGF (aa. 182-250) fusion protein.

Application

The antibody specificity was assayed by Western blot analysis with the CTGF (aa. 182-250) fusion protein. However, for the first testing, we recommend 1/5000 dilution for ELISA, 1/10000 dilution for Western blot analysis (WB) of recombinant protein, 1/5000 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

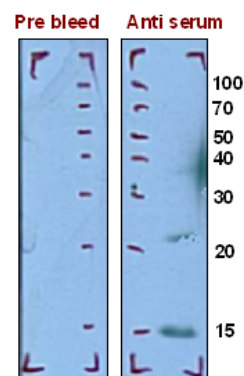
Related Products

1. Anti-CTGF mouse polyclonal antibody (GB-10516)
2. Anti-CTGF mouse monoclonal antibody (GB-52516)
3. Anti-CTGF mouse monoclonal antibody (GB-52550)

Ab dilution	Pre-bleed	Purified-Ab
1:1K	0.165	1.706
1:10K	0.063	1.103
1:100K	0.053	0.354
1:1,000K	0.052	0.102
Titer		~831 K

ELISA Protocol

Antigen is coated on EIA strips at 1 μ g per well. Add 200 μ l of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-10520 is diluted in series as 10³~10⁶ folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as >0.1 of ABS of antiserum minus pre-bleed serum.



E. coli derived CTGF (aa. 182-250) fusion protein as test antigen.

Western blotting Protocol

1. Block with 3%BSA/TBST for 1 hour at RT.
2. Wash blot with 0.05% TBST 3 X 15 minutes.
3. Add 10000X dilution of antibody.
4. Incubate for 1 hour at RT.
5. Wash blot with 0.05% TBST 3 X 15 minutes.
6. Add appropriate amount of correct secondary antibody,(goat anti-rabbit antibody conjugated with HRP).
7. Incubate for 1 hour at RT.
8. Wash blot 3 X 15 minutes with 0.05% TBST at RT.
9. Add HRP substrate and develop

Storage

It is supplied as protein A affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1 \times PBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

- 1.Kubota S., Takigawa M. CCN family genes in the development and differentiation of cartilage tissues. *Clin Calcium*. 16(3):486-92, 2006.
- 2.Grotendorst,G.R., Duncan,M.R. Individual domains of connective tissue growth factor regulate fibroblast proliferation and myofibroblast differentiation. *FASEB J*. 19 (7), 729-738, 2005.
- 3.Brigstock,D.R. Regulation of angiogenesis and endothelial cell function by connective tissue growth factor (CTGF) and cysteine-rich 61(CYR61). *Angiogenesis* 5 (3), 153-165, 2002.