



Anti-CTGF , Mouse-Monoclonal Antibody

Catalog No. GB-52516
Antigen species: Human
Type: IgM

Quantity: 100 μ l
Reactivity: Human
Clone No.: 32

Applications tested: ELISA
Host species: Mouse
Form: Ascites

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, placentation , tumor formation, fibrosis and wound healing.

Antigen

This monoclonal antibody was raised by immunizing mouse with a 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 1/2000 dilution for ELISA, 1/1000 dilution for Western blot analysis (WB) of recombinant protein, 1/100 dilution for tissue extracts or cell lysates, 1/50 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-CTGF rabbit polyclonal antibody (GB-10520)
2. Anti-CTGF mouse polyclonal antibody (GB-10516)
3. Anti-CTGF mouse monoclonal antibody (GB-52550)

Ab dilution	Pre-bleed	Ascites
1:0.1K	0.123	0.988
1:1K	0.074	0.688
1:10K	0.067	0.200
1:100K	0.068	0.080
Titer		33 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. Pre-bleed and ascites are diluted in series as the left and added in separate wells. Add substrate to develop color for 5 min. Read absorbance(ABS) at 650 nm. Antibody titer is defined as >0.1 of ABS of antiserum minus pre-bleed serum.

Storage

It is supplied as ascites of monoclonal antibody in lyophilized powder. Rehydrate the powder with 100 microliter sterile water will restore to the original condition. Store at 4 $^{\circ}$ C for short-term application. For long-term storage, aliquot and store at -20 $^{\circ}$ 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.