SANTA CRUZ BIOTECHNOLOGY, INC.

Cyr61 (H-78): sc-13100

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cyr61 is a secreted heparin binding protein, encoded by a growth factor-inducible immediate-early gene, that associates with the extracellular matrix and connective tissue. Cyr61 is a member of a distinct family of angiogenic and vasculogenic regulators designated CCN proteins, which includes connective tissue growth factor (CTGF) and the mouse Cyr61 homolog, Fisp12. As an angiogenic inducer, Cyr61 binds to the cell surface receptor Integrin $\alpha v/\beta 3$, where it then stimulates cell adhesion and migration and promotes DNA synthesis of human vascular endothelial cells. Expression of Cyr61 is elevated during vessel growth, wound healing and chondrocyte differentiation. Cyr61 is also detected in a wide variety of tumors as it induces tumor growth and functions as a marker of tumor progression.

CHROMOSOMAL LOCATION

Genetic locus: CYR61 (human) mapping to 1p22.3; Cyr61 (mouse) mapping to 3 H2.

SOURCE

Cyr61 (H-78) is a rabbit polyclonal antibody raised against amino acids 163-240 of Cyr61 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Cyr61 (H-78) is recommended for detection of Cyr61 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Cyr61 (H-78) is also recommended for detection of Cyr61 in additional species, including equine.

Suitable for use as control antibody for Cyr61 siRNA (h): sc-39331, Cyr61 siRNA (m): sc-39332, Cyr61 shRNA Plasmid (h): sc-39331-SH, Cyr61 shRNA Plasmid (m): sc-39332-SH, Cyr61 shRNA (h) Lentiviral Particles: sc-39331-V and Cyr61 shRNA (m) Lentiviral Particles: sc-39332-V.

Molecular Weight of Cyr61: 40 kDa.

Positive Controls: FHs 173We cell lysate: sc-2417.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

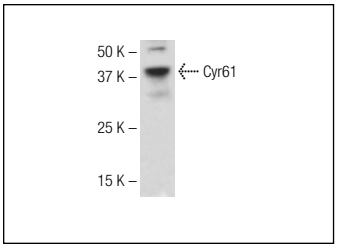
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

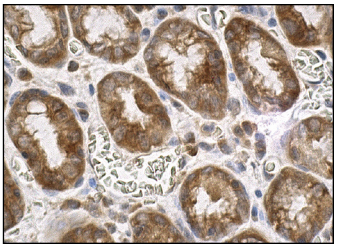
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Cyr61 (H-78): sc-13100. Western blot analysis of Cyr61 expression in FHs 173We whole cell lysate.



Cyr61 (H-78): sc-13100. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Jiang, W.G., et al. 2004. Differential expression of the CCN family members Cyr61, CTGF and Nov in human breast cancer. Endocr. Relat. Cancer 11: 781-791.
2. D'Antonio, K.B., et al. 2010. Decreased expression of Cyr61 is associated with prostate cancer recurrence after surgical treatment. Clin. Cancer Res. 16: 5908-5913.
3. Sabile, A.A., et al. 2011. Cyr61 expression in osteosarcoma indicates poor prognosis and promotes intratibial growth and lung metastasis in mice. J. Bone Miner. Res. 27: 58-67.
4. Kawaki, H., et al. 2011. Differential roles of CCN family proteins during osteoblast differentiation: involvement of Smad and MAPK signaling pathways. Bone 49: 975-989.
5. Ladwa, R., et al. 2011. Expression of CTGF and Cyr61 in colorectal cancer. J. Clin. Pathol. 64: 58-64.
6. Tang, Q.L., et al. 2011. Expression of Cyr61 in primary salivary adenoid cystic carcinoma and its relation to Ki-67 and prognosis. Oral Oncol. 47: 365-370.
7. Hirschfeld, M., et al. 2011. Expression of tumor-promoting Cyr61 is regulated by hTRA2-β1 and acidosis. Hum. Mol. Genet. 20: 2356-2365.
8. Cui, T.X., et al. 2011. C/EBP mediates growth hormone-regulated expression of multiple target genes. Mol. Endocrinol. 25: 681-693.
9. Uzma, M., et al. 2011. Pattern of expression of CCN family members Cyr61, CTGF and NOV in human acute and chronic wounds. Exp. Ther. Med. 256: 641-645.