Cyr61 (h): 293T Lysate: sc-175194



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.

REFERENCES

- O'Brien, T.P., Yang, G.P., Sanders, L. and Lau, L.F. 1990. Expression of Cyr61, a growth factor-inducible immediate-early gene. Mol. Cell. Biol. 10: 3569-3577.
- 2. O'Brien, T.P. and Lau, L.F. 1992. Expression of the growth factor-inducible immediate early gene Cyr61 correlates with chondrogenesis during mouse embryonic development. Cell Growth Differ. 3: 645-654.
- 3. Martinerie, C., Viegas-Pequignot, E., Nguyen, V.C. and Perbal, B. 1997. Chromosomal mapping and expression of the human Cyr61 gene in tumour cells from the nervous system. Mol. Pathol. 50: 310-316.
- Babic, A.M., Kireeva, M.L., Kolesnikova, T.V. and Lau, L.F. 1998. Cyr61, a product of a growth factor-inducible immediate early gene, promotes angiogenesis and tumor growth. Proc. Natl. Acad. Sci. USA 95: 6355-6360.
- 5. Jedsadayanmata, A., Chen, C.C., Kireeva, M.L., Lau, L.F. and Lam, S.C. 1999. Activation-dependent adhesion of human platelets to Cyr61 and Fisp12/mouse connective tissue growth factor is mediated through Integrin α Ilb/ β 3. J. Biol. Chem. 274: 24321-24327.
- 6. Babic, A.M., Chen, C.C. and Lau, L.F. 1999. Fisp12/mouse connective tissue growth factor mediates endothelial cell adhesion and migration through Integrin $\alpha V/\beta 3$, promotes endothelial cell survival, and induces angiogenesis *in vivo*. Mol. Cell. Biol. 19: 2958-2966.

CHROMOSOMAL LOCATION

Genetic locus: CYR61 (human) mapping to 1p22.3.

PRODUCT

Cyr61 (h): 293T Lysate represents a lysate of human Cyr61 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Cyr61 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Cyr61 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com