

uPAR (h2): 293T Lysate: sc-170817

BACKGROUND

Urokinase plasminogen activator receptor (uPAR), also designated CD87, is a glycoprotein I-anchored surface receptor specific for urokinase plasminogen activator (uPA). Upon binding to uPAR, uPA converts the surface bound, large serum β -globulin, plasminogen to plasmin. Plasmin, which is also designated fibrinolysin, is a Trypsin-like enzyme that acts on Arg-Lys bonds and induces pericellular proteolysis in Fibrin and Fibrinogen, and thereby contributes to the systematic activation of the coagulation cascade. This pathway is observed during re-epithelialization of lesions, wound healing and tissue remodeling. uPA and uPAR are known to be overexpressed in mesenchymal and epithelial origin tumor cells and are required for tumor invasion and metastasis. Ras, MEK, ERK and MLCK function as downstream effectors in the uPAR-dependent signaling cascade, which is initiated by uPA binding, and promotes cellular migration in an integrin selective manner.

REFERENCES

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2. Roldan, A.L., et al. 1990. Cloning and expression of the receptor for human urokinase plasminogen activator, a central molecule in cell surface, plasmin dependent proteolysis. *EMBO J.* 9: 467-474.
3. Behrendt, N., et al. 1990. The human receptor for urokinase plasminogen activator. NH₂-terminal amino acid sequence and glycosylation variants. *J. Biol. Chem.* 265: 6453-6460.
4. Solberg, H., et al. 1992. Identification and characterization of the murine cell surface receptor for the urokinase-type plasminogen activator. *Eur. J. Biochem.* 205: 451-458.
5. Prentice, C.R., et al. 1993. The fibrinolytic response to anicrod therapy: characterization of Fibrinogen and Fibrin degradation products. *Br. J. Haematol.* 83: 276-281.
6. Ghiso, J.A., et al. 1999. Deregulation of the signaling pathways controlling urokinase production. Its relationship with the invasive phenotype. *Eur. J. Biochem.* 263: 295-304.
7. Nguyen, D.H., et al. 1999. Myosin light chain kinase functions downstream of Ras/ERK to promote migration of urokinase-type plasminogen activator-stimulated cells in an integrin-selective manner. *J. Cell Biol.* 146: 149-164.

CHROMOSOMAL LOCATION

Genetic locus: PLAUR (human) mapping to 19q13.31.

PRODUCT

uPAR (h2): 293T Lysate represents a lysate of human uPAR transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

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.

APPLICATIONS

uPAR (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive uPAR antibodies. Recommended use: 10-20 μ l per lane.

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

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.