SANTA CRUZ BIOTECHNOLOGY, INC.

uPAR (FL-290): sc-10815

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

Genetic locus: PLAUR (human) mapping to 19q13.31; Plaur (mouse) mapping to 7 A3.

SOURCE

uPAR (FL-290) is a rabbit polyclonal antibody raised against amino acids 1-290 representing full length uPAR 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

uPAR (FL-290) is recommended for detection of uPAR 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for uPAR siRNA (h): sc-36781, uPAR siRNA (m): sc-36782, uPAR shRNA Plasmid (h): sc-36781-SH, uPAR shRNA Plasmid (m): sc-36782-SH, uPAR shRNA (h) Lentiviral Particles: sc-36781-V and uPAR shRNA (m) Lentiviral Particles: sc-36782-V.

Molecular Weight of uPAR: 55-60 kDa.

Positive Controls: uPAR (h): 293T Lysate: sc-159642, HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

STORAGE

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

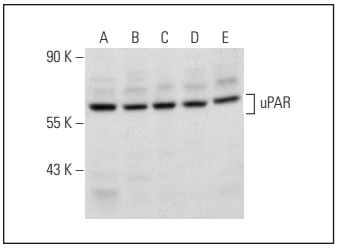
PROTOCOLS

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

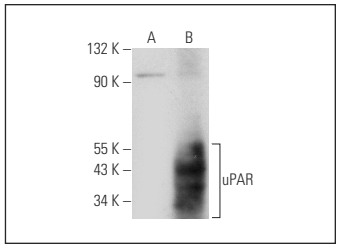
RESEARCH USE

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

DATA



uPAR (FL-290): sc-10815. Western blot analysis of uPAR expression in MCF7 (**A**), HeLa (**B**), K-562 (**C**), LADMAC (**D**) and SHP-77 (**E**) whole cell lysates.



uPAR (FL-290): sc-10815. Western blot analysis of uPAR expression in non-transfected: sc-117752 (**A**) and human uPAR transfected: sc-159642 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Odet, F., et al. 2004. Evidence for similar expression of protein C inhibitor and the urokinase-type plasminogen activator system during mouse testis development. Endocrinology 145: 1481-1489.
2. Guyot, R., et al. 2004. Diethylstilbestrol inhibits the expression of the steroidogenic acute regulatory protein in mouse fetal testis. Mol. Cell. Endocrinol. 220: 67-75.
3. Yu, J., et al. 2004. p38 Mitogen-activated protein kinase regulation of endothelial cell migration depends on urokinase plasminogen activator expression. J. Biol. Chem. 279: 50446-50454.
4. det, F., et al. 2004. Evidence for similar expression of protein C inhibitor and the urokinase-type plasminogen activator system during mouse testis development. Endocrinology 145: 1481-1489.
5. Harvey, T.J., et al. 2010. Retargeted adenoviral cancer gene therapy for tumour cells overexpressing epidermal growth factor receptor or urokinase-type plasminogen activator receptor. Gene Ther. 17: 1000-1010.
6. Stavropoulou, A., et al. 2010. uPA, uPAR and TGFβ_1 expression during early and late post myocardial infarction period in rat myocardium. In Vivo 24: 647-652.
7. Devy, J., et al. 2011. The anti-invasive activity of synthetic alkaloid ethoxyfagaronine on L1210 leukemia cells is mediated by down-regulation of plasminogen activators and MT1-MMP expression and activity. Invest. New Drugs 29: 730-741.