

Mouse Anti-uPAR/CD87 [10G7]: MC0181, MC0181RTU7

Intended Use: For Research Use Only

Description: 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.

Specifications

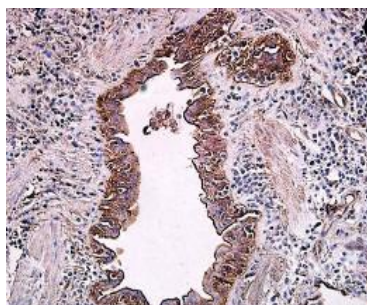
Clone: 10G7
 Source: Mouse
 Isotype: IgG
 Reactivity: Human
 Immunogen: Human uPAR full length protein
 Localization: Membrane, secreted
 Formulation: Antibody in PBS pH 7.2 containing BSA and 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, ICC/IF, Indirect Flow Cyt., IP, WB
 Package:

| Description | Catalog No. | Size |
|------------------------|-------------|------|
| uPAR/CD87 Concentrated | MC0181 | 1 ml |
| uPAR/CD87 Prediluted | MC0181RTU7 | 7 ml |

IHC Procedure*

Positive Control Tissue: Placenta, MCF7, SMMC, HeLa, Raji and Colo320 whole cell lysates; MCF7 cells Concentrated
 Dilution: 25-100
 Pretreatment: Citrate pH6.0 or Tris EDTA pH9.0, 15 min Pressure Cooker or 30-60 min water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE epithelium of small airways from smokers with COPD stained with anti-uPAR using DAB

References:

1. The role of uPAR in epithelial-mesenchymal transition in small airway epithelium of patients with chronic obstructive pulmonary disease. Wang, Q. et al. Respir. Res. 14: 67, 2013.
2. Small-molecule inhibition of the uPAR-uPA interaction: synthesis, biochemical, cellular, in vivo pharmacokinetics and efficacy studies in breast cancer metastasis. Mani, T. et al. Bioorg. Med. Chem. 21: 2145-55, 2013.
3. Differences in integrin expression and signaling within human breast cancer cells. Taherian, A. et al. BMC Cancer. 11, 2011.
4. Suppression of the uPAR-uPA System Retards Angiogenesis, Invasion, and In Vivo Tumor Development in Pancreatic Cancer Cells. Gorantla, B. et al. Mol Cancer Res. 9: 377-389, 2011.

Doc. 100-MC0181
Rev. A