Data Sheet (Cat.No.TMAH-00994)

Anti-PODXL Antibody (7U177)

Product Details

Ig Type:	IgG2b
Reactivity:	Human, Mouse, Rat
Conjugation:	Unconjugated
Clone:	7U177
Purification:	Protein G purified

Applications

Verified Activity:

1. Western Blot
-Positive WB detected in: Hela whole cell lysate, HEK293 whole cell lysate
-All lanes: PODXL antibody at 2.5μg/ml
-Secondary: Goat polyclonal to Mouse IgG at 1/5000 dilution
-Predicted band size: 59, 56 kDa
-Observed band size: 59 kDa
2. Western Blot
-Positive WB detected in: A549 whole cell lysate
-All lanes: PODXL antibody at 2.5μg/ml
-Secondary: Goat polyclonal to Mouse IgG at 1/5000 dilution
-Predicted band size: 59, 56 kDa
-Observed band size: 59 kDa
3. Western Blot
-Positive WB detected in: Mouse brain tissue
-All lanes: PODXL antibody at 0.43μg/ml
-Secondary: Goat polyclonal to Mouse IgG at 1/5000 dilution
-Predicted band size: 59, 56 kDa
-Observed band size: 59 kDa
4. Western Blot
-Positive WB detected in: Rat brain tissue, Rat heart tissue, Rat kidney tissue
-All lanes: PODXL antibody at 1.28μg/ml
-Secondary: Goat polyclonal to Mouse IgG at 1/5000 dilution
-Predicted band size: 59, 56 kDa
-Observed band size: 59 kDa
5. Immunohistochemistry of paraffin-embedded human kidney tissue using TMAH-00994 at dilution of 1:200
6. Immunohistochemistry of paraffin-embedded human melanoma using TMAH-00994 at dilution of 1:200
7. Immunofluorescent analysis of Hela cells using TMAH-00994 at a dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).
8. Immunofluorescent analysis of PC-3 cells using TMAH-00994 at a dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).
9. Immunofluorescent analysis of A549 cells using TMAH-00994 at a dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).
10. Immunofluorescent analysis of Ntera-2 cells using TMAH-00994 at a dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).

11. Overlay histogram showing Hela cells stained with TMAH-00994 (red line). The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (10µg/1*10^6 cells) for 1 h at 4°C. The secondary antibody used was FITC goat anti-mouse IgG(H+L) at 1/200 dilution for 1 h at 4°C. Isotype control antibody (green line) was mouse IGg2b (10µg/1*10^6 cells) used under the same conditions. Acquisition of >10,000 events was performed.
12. Immunoprecipitating PODXL in HEK293 whole cell lysate
-Lane 1: Mouse control IgG (1µg) instead of TMAH-00994 in HEK293 whole cell lysate.
For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)
-Lane 2: TMAH-00994 (8µg) + HEK293 whole cell lysate (500µg)
-Lane 3: HEK293 whole cell lysate (10µg)

Application: ELISA,FCM,IF,IHC,IP,WB

Properties

Purity: >95%

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein: Human PODXL Protein

Antigen Species: Human

Gene ID: 5420

Uniprot ID: O00592

Biology Area: Signal Transduction

Research Background

Involved in the regulation of both adhesion and cell morphology and cancer progression. Functions as an anti-adhesive molecule that maintains an open filtration pathway between neighboring foot processes in the podocyte by charge repulsion. Acts as a pro-adhesive molecule, enhancing the adherence of cells to immobilized ligands, increasing the rate of migration and cell-cell contacts in an integrin-dependent manner. Induces the formation of apical actin-dependent microvilli. Involved in the formation of a preapical plasma membrane subdomain to set up initial epithelial polarization and the apical lumen formation during renal tubulogenesis. Plays a role in cancer development and aggressiveness by inducing cell migration and invasion through its interaction with the actin-binding protein EZR. Affects EZR-dependent signaling events, leading to increased activities of the MAPK and PI3K pathways in cancer cells.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481