**BACKGROUND**

CD109 is a glycosylphosphatidylinositol (GPI)-linked cell surface glycoprotein. It is a member of the α-macroglobulin/C3, C4, C5 family of thioester-containing proteins. CD109 is expressed by CD34+ acute myeloid leukemia cell lines, activated T lymphoblasts, activated platelets, T cell lines, endothelial cells, lung and esophageal squamous cell carcinomas and testis. It has all the characteristics of a cancer-testis antigen. CD109 carries the platelet-specific Glycoprotein antigen system, which is involved in platelet transfusion refractoriness via regulation of EGFR and Stat3 signalling in cervical squamous cell carcinoma. Br. J. Cancer 123: 833-843.

**CHROMOSOMAL LOCATION**

Genetic locus: CD109 (human) mapping to 6q13; Cd109 (mouse) mapping to 9 E1.

**SOURCE**

CD109 (C-9) is a mouse monoclonal antibody raised against amino acids 957-1041 mapping within an internal region of CD109 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD109 (C-9) is available conjugated to agarose (sc-271085 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271085 HRP), 200 µg/ml, for WB, HCl(P) and ELISA; to either phycoerythrin (sc-271085 PE), fluorescein (sc-271085 FITC), Alexa Fluor® 488 (sc-271085 AF488), Alexa Fluor® 546 (sc-271085 AF546), Alexa Fluor® 594 (sc-271085 AF594) or Alexa Fluor® 647 (sc-271085 AF647), 200 µg/ml, for WB (RGB), IF, HCl(P) and FCM; and to either Alexa Fluor® 680 (sc-271085 AF680) or Alexa Fluor® 790 (sc-271085 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

CD109 (C-9) is recommended for detection of CD109 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate), immunochemistry (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunofluorescent western blot analysis of CD109 expression in U-251-MG (A), A549 (B) and HeLa (C) whole cell lysates. Blocked with UltraCruz™ Blocking Reagent: sc-516214.

Suitable for use as control antibody for CD109 siRNA (h): sc-44950; CD109 siRNA (m): sc-44951; CD109 shRNA Plasmid (h): sc-44950-Sh; NCI69 shRNA Plasmid (m): sc-44951-Sh; CD109 shRNA (h) Lentiviral Particles: sc-44950-V and CD109 shRNA (m) Lentiviral Particles: sc-44951-V.

Molecular Weight of CD109: 170 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176, A549 cell lysate: sc-2413 or HeLa whole cell lysate: sc-2200.

**STORAGE**

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

**RESEARCH USE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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