

# CD109 (C-17): sc-33115

## BACKGROUND

CD109 is a glycosylphosphatidylinositol (GPI)-linked cell surface glycoprotein. It is a member of the  $\alpha$ -Macroglobulin/C3, C4, C5 family of thioester-containing proteins. CD109 is expressed by CD34<sup>+</sup> 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 Gov antigen system, which is involved in platelet transfusion refraction, neonatal alloimmune thrombocytopenia and posttransfusion purpura.

## REFERENCES

1. Sasaki, R., et al. 1979. Terminal deoxynucleotidyl transferase activity and B cell markers in chronic myelogenous leukemia blast crisis. *Acta Haematol.* 62: 143-147.
2. Kelton, J.G., et al. 1990. Gov a/b alloantigen system on human platelets. *Blood* 75: 2172-2176.

## CHROMOSOMAL LOCATION

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

## SOURCE

CD109 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD109 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33115 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CD109 (C-17) is recommended for detection of CD109 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

CD109 (C-17) is also recommended for detection of CD109 in additional species, including equine and canine.

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

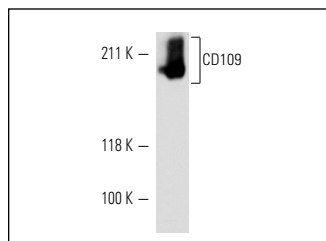
Molecular Weight of CD109: 170 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, mouse testis extract: sc-2405 or human platelet whole cell lysate.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA



CD109 (C-17): sc-33115. Western blot analysis of CD109 expression in human platelet whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Zhang, F., et al. 2014. SWATH<sup>™</sup>- and iTRAQ-based quantitative proteomic analyses reveal an overexpression and biological relevance of CD109 in advanced NSCLC. *J. Proteomics* 102: 125-136.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **CD109 (C-9): sc-271085** or **CD109 (H-7): sc-365780**, our highly recommended monoclonal alternatives to CD109 (C-17).