

CD229 (K-12): sc-33236

BACKGROUND

T lymphocyte surface antigen Ly9 (CD229), also designated lymphocyte antigen 9 or cell-surface molecule Ly9, is a cell surface glycoprotein. CD229 is a Type I membrane protein that is crucial in adhesion reactions between T lymphocytes and accessory cells (homophilic interaction). It belongs to the CD2 subfamily of the immunoglobulin gene superfamily of proteins (along with CD2, CD48, CD58, CD84, CD244 and CD150). Receptors of this family are important in cytokine production regulation and cytotoxicity of lymphocytes and NK cells. CD229 interacts with the SAP/SH2D1A protein. CD229 is expressed on mature B cells, T cells, thymocytes and NK cells.

REFERENCES

- Sandrin, M.S., et al. 1992. Isolation and characterization of cDNA clones for mouse Ly-9. *J. Immunol.* 149: 1636-1641.
- Sandrin, M.S., et al. 1996. Isolation and characterization of cDNA clones for Humly9: the human homologue of mouse Ly9. *Immunogenetics* 43: 13-19.
- Tovar, V., et al. 2000. Gene structure of the mouse leukocyte cell surface molecule Ly9. *Immunogenetics* 51: 788-793.
- Romero, X., et al. 2005. CD229 (Ly9) lymphocyte cell surface receptor interacts homophilically through its N-terminal domain and relocates to the immunological synapse. *J. Immunol.* 174: 7033-7042.
- Martin, M., et al. 2005. Identification of GRB2 as a novel binding partner of the signaling lymphocytic activation molecule-associated protein binding receptor CD229. *J. Immunol.* 174: 5977-5986.
- SWISS-PROT/TrEMBL (Q9HBG7). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: LY9 (human) mapping to 1q23.3.

SOURCE

CD229 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of CD229 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.

Blocking peptide available for competition studies, sc-33236 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

CD229 (K-12) is recommended for detection of CD229 of 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 CD229 siRNA (h): sc-44551, CD229 shRNA Plasmid (h): sc-44551-SH and CD229 shRNA (h) Lentiviral Particles: sc-44551-V.

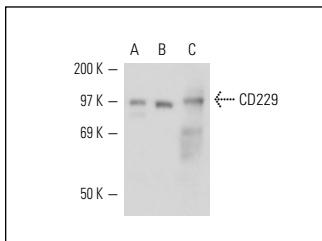
Molecular Weight of CD229: 100-120 kDa.

Positive Controls: ALL-SILL whole cell lysate: sc-364356, Daudi cell lysate: sc-2415 or NK-92 whole cell lysate: sc-364788.

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ 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™ Mounting Medium: sc-24941.

DATA



CD229 (K-12): sc-33236. Western blot analysis of CD229 expression in ALL-SIL (A), Daudi (B) and NK-92 (C) whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **CD229 (HLy 9.1.25): sc-58992** or **CD229 (3H1998): sc-70591**, our highly recommended monoclonal alternatives to CD229 (K-12).