CD6 (H-6): sc-373947

BACKGROUND

CD6 is a type I transmembrane glycoprotein that is present on mature thymocytes, peripheral T cells and a subset of B cells. The CD6 glycoprotein is tyrosine phosphorylated during TCR-mediated T-cell activation and the size difference between the CD6 forms is due in part to differences in phosphorylation state. CD6 protein contains a 24-amino acid signal sequence, three extracellular “scavenger receptor cysteine-rich” (SRCR) domains, a membrane-spanning domain, and a 44-amino acid cytoplasmic domain. CD6 shows significant homology to CD5. CD6, which is also found in brain and B cell chronic lymphocytic leukemias, plays an important role in interactions of thymocytes with thymic epithelial cells. CD6 molecules can physically associate with the TCR/CD3 complex.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: CD6 (human) mapping to 11q12.2; Cd6 (mouse) mapping to 19 A.

SOURCE

CD6 (H-6) is a mouse monoclonal antibody raised against amino acids 369-668 of CD6 of human origin.

PRODUCT

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

APPLICATIONS

CD6 (H-6) is recommended for detection of CD6 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)], 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 CD6 siRNA (h): sc-35015, CD6 siRNA (m): sc-35016, CD6 shRNA Plasmid (h): sc-35015-SH, CD6 shRNA Plasmid (m): sc-35016-SH, CD6 shRNA (h) Lentiviral Particles: sc-35015-V and CD6 shRNA (m) Lentiviral Particles: sc-35016-V.

Molecular Weight of CD6: 90-130 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, BYDP whole cell lysate: sc-364368 or Ramos cell lysate: sc-2216.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGk BP-FITC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

CD6 (H-6): sc-373947. Western blot analysis of CD6 expression in Raji (A), WEHI-231 (B), RAW 264.7 (C) and PC-12 (D) whole cell lysates.

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.