

RP105 (C-20): sc-27841

BACKGROUND

RP105 is a mouse B cell surface molecule that transmits a growth-promoting signal and is implicated in the life/death decision of B cells. RP105 has tandem repeats of a leucine-rich motif in its extracellular domain that are presumed to be involved in protein-protein interactions. The amino acid sequence of human RP105 is highly homologous to that of mouse RP105; human RP105 shares 74% identity with the mouse protein, as well as the leucine-rich motif. Surface expression of RP105 is enhanced in the presence of MD1, although this expression is restricted to CD19-positive B cells. RP105 demonstrates predominant expression on mature B cells in mantle zones; very little expression is observed in germinal centers.

REFERENCES

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4. Miura, Y., et al. 1998. RP105 is associated with MD-1 and transmits an activation signal in human B cells. *Blood* 92: 2815-2822.
5. Miyake, K., et al. 1998. Mouse MD-1, a molecule that is physically associated with RP105 and positively regulates its expression. *J. Immunol.* 161: 1348-1353.
6. Brightbill, H.D., et al. 1999. Host defense mechanisms triggered by microbial lipoproteins through toll-like receptors. *Science* 285: 732-736.
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8. Chuang, T.H., et al. 2000. Cloning and characterization of a sub-family of human toll-like receptors: hTLR7, hTLR8, hTLR9. *Eur. Cytokine Netw.* 11: 372-378.
9. Miyake, K., et al. 2000. Innate recognition of lipopolysaccharide by toll-like receptor 4/MD-2 and RP105/MD-1. *J. Endotoxin Res.* 6: 389-391.

CHROMOSOMAL LOCATION

Genetic locus: CD180 (human) mapping to 5q12.3; Cd180 (mouse) mapping to 13 D1.

SOURCE

RP105 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of RP105 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.2% gelatin.

Blocking peptide available for competition studies, sc-27841 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RP105 (C-20) is recommended for detection of precursor and mature RP105 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

RP105 (C-20) is also recommended for detection of precursor and mature RP105 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for RP105 siRNA (h): sc-72150, RP105 siRNA (m): sc-40253, RP105 shRNA Plasmid (h): sc-72150-SH, RP105 shRNA Plasmid (m): sc-40253-SH, RP105 shRNA (h) Lentiviral Particles: sc-72150-V and RP105 shRNA (m) Lentiviral Particles: sc-40253-V.

Molecular Weight of RP105: 95-105 kDa.

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) 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.

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 or our catalog for detailed protocols and support products.


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Try **RP105 (G28.8): sc-73648**, our highly recommended monoclonal alternative to RP105 (C-20).