

CD81 (C-20): sc-7102

BACKGROUND

CD81, also called TAPA-1, is a type III transmembrane protein that is broadly expressed on cells of hematopoietic, neuroectodermal and mesenchymal origin. CD81 is believed to be involved in both cell growth and signal transduction. It can be present as a multimolecular complex in association with CD37 and/or CD53, or on the surface of B cells in association with CD19, CD21 and/or MHC class II antigens.

REFERENCES

- Oren, R., et al. 1990. TAPA-1, the target of an antiproliferative antibody, defines a new family of transmembrane proteins. *Mol. Cell. Biol.* 10: 4007-4015.
- Wright, M.D. and Tomlinson, M.G. 1994. The ins and outs of the transmembrane 4 superfamily. *Immunol. Today* 15: 588-594.
- Fearon, D.T. and Carter, R.H. 1995. The CD19/CR2/TAPA-1 complex of B lymphocytes: linking natural to acquired immunity. *Annu. Rev. Immunol.* 13: 127-149.

CHROMOSOMAL LOCATION

Genetic locus: CD81 (human) mapping to 11p15.5; Cd81 (mouse) mapping to 7 F5.

SOURCE

CD81 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping to the C-terminus of CD81 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-7102 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD81 (C-20) is recommended for detection of CD81 of mouse, rat and 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).

CD81 (C-20) is also recommended for detection of CD81 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CD81 siRNA (h): sc-35030, CD81 siRNA (m): sc-37251, CD81 shRNA Plasmid (h): sc-35030-SH, CD81 shRNA Plasmid (m): sc-37251-SH, CD81 shRNA (h) Lentiviral Particles: sc-35030-V and CD81 shRNA (m) Lentiviral Particles: sc-37251-V.

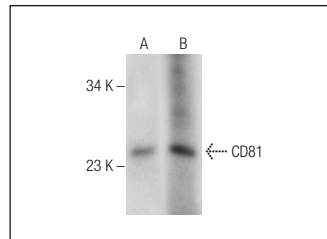
Molecular Weight of CD81: 22-26 kDa.

Positive Controls: rat cerebellum extract: sc-2398, human testis extract: sc-363781 or MM-142 cell lysate: sc-2246.

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



CD81 (C-20): sc-7102. Western blot analysis of CD81 expression in rat cerebellum (A) and human testis (B) tissue extracts.

SELECT PRODUCT CITATIONS

- Chan-Fook, C., et al. 2000. Hepatitis C virus glycoprotein E2 binding to CD81: the role of E1E2 cleavage and protein glycosylation in bioactivity. *Virology* 273: 60-66.

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.



Try **CD81 (B-11): sc-166029** or **CD81 (D-4): sc-166028**, our highly recommended monoclonal alternatives to CD81 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CD81 (B-11): sc-166029**.