

# CD81 (H-121): sc-9158

## 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. CD81 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 (H-121) is a rabbit polyclonal antibody raised against amino acids 90-210 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.

## APPLICATIONS

CD81 (H-121) 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 (H-121) is also recommended for detection of CD81 in additional species, including equine, canine, bovine and porcine.

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: IB4 whole cell lysate: sc-364780, Ramos cell lysate: sc-2216 or MM-142 cell lysate: sc-2246.

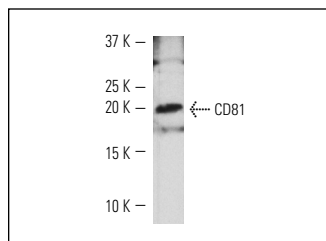
## RESEARCH USE

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

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



CD81 (H-121): sc-9158. Western blot analysis of CD81 expression in Ramos whole cell lysate.

## SELECT PRODUCT CITATIONS

- Cho, J.A., et al. 2005. Exosomes: a new delivery system for tumor antigens in cancer immunotherapy. *Int. J. Cancer* 114: 613-622.
- Nazarenko, I., et al. 2010. Cell surface tetraspanin Tspan8 contributes to molecular pathways of exosome-induced endothelial cell activation. *Cancer Res.* 70: 1668-1678.
- Ma, J., et al. 2010. CD81 inhibits the proliferation of astrocytes by inducing G<sub>0</sub>/G<sub>1</sub> arrest *in vitro*. *J. Huazhong Univ. Sci. Technol. Med. Sci.* 30: 201-205.
- Hong, I.K., et al. 2012. Tetraspanin CD151 stimulates adhesion-dependent activation of Ras, Rac, and Cdc42 by facilitating molecular association between β1 integrins and small GTPases. *J. Biol. Chem.* 287: 32027-32039.
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- Lee, C., et al. 2012. Exosomes mediate the cytoprotective action of mesenchymal stromal cells on hypoxia-induced pulmonary hypertension. *Circulation* 126: 2601-2611.
- Hauser, J., et al. 2013. Broad feedback inhibition of pre-B-cell receptor signaling components. *Mol. Immunol.* 54: 247-253.
- Wilkins, C., et al. 2013. IFITM1 is a tight junction protein that inhibits hepatitis C virus entry. *Hepatology* 57: 461-469.
- Gallart-Palau, X., et al. 2015. Extracellular vesicles are rapidly purified from human plasma by PProtein Organic Solvent PRecipitation (PROSPR). *Sci. Rep.* 5: 14664.



Try **CD81 (B-11): sc-166029** or **CD81 (D-4): sc-166028**, our highly recommended monoclonal alternatives to CD81 (H-121). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **CD81 (B-11): sc-166029**.