

# Monoclonal Antibody CD49c

PN IM2000 – Purified – Freeze-dried – 0.2 mg – Clone C3VLA3

For Research Use Only. Not for use in diagnostic procedures.

## SPECIFICITY

The CD49c molecule is the  $\alpha 3$  subunit of the integrin  $\alpha 3\beta 1$  (CD49c/CD29 or VLA-3). It has a non-reduced molecular weight of 150 kDa and upon reduction, is cleaved into fragments of 125 and 25 kDa (1).

The C3VLA3 monoclonal antibody recognizes an amino-terminal epitope of the integrin  $\alpha 3$  chain and immunoprecipitates the 120-130 kDa fragment under reducing conditions.

C3VLA3 is a blocking antibody since it inhibits adhesion of human keratinocytes to laminin 5 *in vitro* functional assays.

C3VLA3 reacts with smooth muscle cells of some blood vessels in normal human breast, colon, kidney and liver and deep layers of skin epithelium. It does not react with skeletal and cardiac muscle cells.

This antibody also reacts with several human cells including some peripheral blood lymphocytes (PBL), PHA-stimulated PBL and high passage cultured human umbilical vein endothelial cells (HUVECs). It does not react with peripheral blood monocytes and granulocytes.

## REAGENT

Monoclonal Antibody CD49c  
PN IM2000 – Purified – Freeze-dried – 0.2 mg

|                     |   |
|---------------------|---|
| <b>Clone</b>        | C3VLA3  |
| <b>Isotype</b>      | IgG1  |
| <b>Species</b>      | Mouse   |
| <b>Immunogen</b>    | Human umbilical vein endothelial cells (HUVECs) |
| <b>Hybridoma</b>    | Myeloma X Balb/c spleen cells                   |
| <b>Source</b>       | Ascites fluid                                   |
| <b>Purification</b> | Ion exchange or affinity                        |

**Buffer** chromatography  
1 mg/mL bovine serum albumin in phosphate-buffered saline

## APPLICATION

Studies of CD49c positive cells.  
Flow cytometry.

## STATEMENT OF WARNINGS

1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
3. Do not use antibody beyond the expiration date on the label.
4. Avoid microbial contamination of reagents or incorrect results might occur.
5. Use good laboratory practices when handling this reagent.

## STORAGE CONDITIONS AND STABILITY

This freeze-dried form may be stored at 2 – 8°C until the expiration date stated on the vial label.

No preservative has been added.

## REAGENT PREPARATION

Depending of usage, reconstitute with 1 mL of distilled water, with or without 0.1% sodium azide (w/v).

The reconstituted form including 0.1% sodium azide may be stored for up to one month at 2 – 8°C.

The reconstituted form without sodium azide can be stored at –20°C or less,

until the expiration date stated on the vial label.

In this case, aliquotting is recommended to avoid multiple freezing / thawing cycles.

## PROCEDURE

For each application, it is recommended to establish the right range of antibody dilutions to be used for the experiment.

## SELECTED RESEARCH REFERENCES

1. Hemler, M.E., Weitzman, J., Bodorova, J., "CD49c (VLA-3 $\alpha$ ) cluster report", 1995. In Leucocyte Typing V, Schlossman, S.F. et al, Eds. Oxford University Press, pp 1616-1617.

## PRODUCT AVAILABILITY

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For additional information in the USA, call 800-526-7694.

Outside the USA, contact your local Beckman Coulter representative.

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