

Anti-human $\alpha3/\beta1$ integrin-CD49c (Clone M-Kid2)

Catalog No: MP-AA-3

BACKGROUND

Integrins are cell surface receptors mediating cell to cell and cell to extracellular matrix (ECM) interactions. They exist as non covalently linked alfa and beta subunits heterodimers displaying specificity for one or more ligands.

PRODUCT

1. Each vial contains the indicated amount of of IgG (caprylic acid purified) in 0,1% gelatine and 0,05 % NaN₃.
2. Unpurified reagent is provided at the indicated amounts with 0.1% NaN₃.
Centrifuge the vial prior to use.

SPECIFICITY

The murine monoclonal antibody MP-AA-3 (IgG1k) has been generated using as immunogen the renal carcinoma cell line KJ29 (1). It recognizes an epitope of the $\alpha3/\beta1$ heterodimer (IHC World Image Gallery), the promiscuous receptor of a number of ECM components including laminin (2-5). The $\alpha3/\beta1$ integrin by mediating TGF- $\beta1$ signalling leads to epithelial-mesenchymal transition (6). Homozygous mutations of the $\alpha3$ gene and lack of expression of the receptor have been shown to be associated with multiorgan disorders with predominant renal and respiratory features (7)

STORAGE

Store frozen, avoid repeated freezing-thawing.
Stable for 2 yrs.

SHIPPING CONDITIONS

Room temperature.

RESEARCH USE

This antibody is for laboratory research use only, not for human or in-vivo use.

APPLICATIONS

ELISA

Recommended for detection of the VLA3 heterodimer (5 μ g/ml).

Flow cytometry

10 μ g/ml.

Immunohistochemistry (fluorescence, enzymatic)

Acetone fixed cryostat sections and cytopins (20 μ g/ml); paraffin embedded tissue: 50 μ g/ml overnight incubation. **No antigen retrieving required.**

Immunoprecipitation

5-10 μ g, using rabbit anti murine Ig and protein A-Sepharose.

REFERENCES

1. *Hybridoma* (1991) **10**: 707
 2. *Pathol Res Pract* (1993) **189**: 387
 3. *Int J Cancer* (1993) **54**: 68
 4. *Int J Cancer* (1994) **58**: 488
 5. *Int J Cancer* (2000) **87**: 336
 6. *J Cell Biol* (2009) **184**: 309
 7. *NEJM* (2012) **366**: 1508
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