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Product datasheet for BM4049

CD49b (ITGA2) Mouse Monoclonal Antibody [Clone ID: A.1.43]

Product data:

Product Type:	Primary Antibodies
Clone Name:	A.1.43
Applications:	IHC
Recommended Dilution:	Suitable for Immunohistochemistry on frozen sections (0.25-2 µg/ml, 1/100-1/800) and FACS. Suggested positive control: Human skin. The antibody is positive on the following melanoma cell lines: BRO, SK-Mel-13, SK-Mel-19, SK-Mel-29, SK-Mel-113, and negative on normal monocytes.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	The antigen is CD49b
Specificity:	The antibody A.1.43 detects CD49b and is a useful tumor progression marker, particularly also in combination with clone A.1.43 detects CD49b and is a useful tumour progression marker, particularly also in combination with clone A10-33/1 (anti gpIIb/IIIa). CD49b, integrin α2, is a transmembrane glycoprotein that is non-covalently associated with the integrin β1 chain to form the α2β1 (very late antigen (VLA) 2) complex. The α2β1 complex was originally reported on long-term activated T cells and was later shown to be identical to the gpIa/IIa complex on platelets. The α2β1 complex is a pivotal receptor for collagen, and the adhesion of platelets to collagen is known to be important for the initial step of platelet aggregation. The antibody stains an epitope on the cell surface. The antibody is positive on the following melanoma cell lines: BRO, SK-Mel-13, SK-Mel-19, SK-Mel-29, SK-Mel-113, and negative on normal monocytes. Tissue sections: Acetone fixed tissue sections of melanoma larger than 1.5 mm show positive staining whereas the majority of benign melanocytic nevi (>95%) are negative.
Formulation:	PBS buffer pH 7.2 with 0.01% Thimerosal as preservative and 1% BSA as stabilizer. State: Purified State: Lyophilized purified Ig fraction
Reconstitution Method:	Restore with 0.6 ml distilled water.

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Concentration:	0.2 mg/ml
Purification:	Affinity chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody at 2-8°C for one month or (in aliquots) at -20°C for longer. Do not freeze working dilutions Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	integrin subunit alpha 2
Database Link:	Entrez Gene 3673 Human P17301
Background:	Integrins are heterodimeric cell surface receptors composed of alpha and beta subunits, which mediate cell-cell and cell-extracellular matrix attachments. They are responsible for adhesion of platelets and other cells to collagens, modulation of collagen and collagenase gene expression, force generation and organization of newly synthesized extracellular matrix. Aberrant integrin expression has been found in many epithelial tumours. Changes in integrin expression have been shown to be important for the growth and early metastatic capacity of melanoma cells.
Synonyms:	Integrin alpha-2, ITGA-2, VLA-2 alpha, VLA2, GPIa, Collagen Receptor
Note:	Protocol: **Protocol with frozen, ice-cold acetone-fixed sections:** The whole procedure is performed at room temperature 1. Wash in PBS 2. Block endogenous peroxidase 3. Wash in PBS 4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber 5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber 6. Wash in PBS 7. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber 8. Wash in PBS 9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min. 10. Wash in PBS 11. Counterstain with Mayer's hemalum For further information and details see technical information