

**BM6027P****Monoclonal Antibody to CD49f / ITGA6 (6B Isoform specific) - Purified****Alternate names:** CD49 antigen-like family member F, Integrin alpha-6, VLA-6, VLA6**Quantity:** 0.1 mg**Concentration:** 1.0 mg/ml

**Background:** Integrins are a family of heterodimeric membrane glycoproteins consisting of non-covalently associated  $\alpha$  and  $\beta$  subunits. More than 18  $\alpha$  and 8  $\beta$  subunits with numerous splice variant isoforms have been identified in mammals. In general, integrins function as receptors for extracellular matrix proteins. Certain integrins can also bind to soluble ligands or to counter-receptors on adjacent cells, such as the intracellular adhesion molecules (ICAMs), resulting in aggregation of cells. Signals transduced by integrins play a role in many biological processes, including cell growth, differentiation, migration and apoptosis. For integrin subunits  $\alpha 3$  and  $\alpha 6$ , two cytoplasmic variants, A and B, have been identified.

**Uniprot ID:** [P23229](#)**NCBI:** [NP\\_000201](#)**GeneID:** [3655](#)**Host / Isotype:** Mouse / IgG1**Recommended Isotype Controls:** SM10P (for use in human samples), AM03095PU-N**Clone:** 6B4

**Immunogen:** 6B4 is a mouse monoclonal IgG1,  $\kappa$  antibody derived by fusion of SP2/0 mouse myeloma cells with spleen cells from a BALB/c mouse immunized with a synthetic peptide corresponding to a 34 amino acid stretch in the cytoplasmic domain of integrin  $\alpha 6B$  including an appending N-terminal Cysteine coupled to keyhole limpet hemocyanin.

**AA Sequence:**  
CSRYDDSVPRYHAVRIRKEEREIKDEKYIDNLEKK

**Format:** **State:** Liquid purified IgG fraction**Buffer System:** PBS**Preservatives:** 0.09% Sodium Azide

**Applications:** Suitable for **Immunoblotting, Immunocytochemistry, Immunohistochemistry on Frozen Sections.**

**Recommended Dilutions:** 1/50-1/100 for Flow Cytometry, and for Immunohistochemistry with Avidin-Biotinylated Horseradish Peroxidase Complex (ABC) as detection reagent, and 1/100-1/500 for Immunoblotting applications. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

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| <b>Specificity:</b>      | <p>It recognizes specifically the cytoplasmic domain of integrin subunit alpha-6B. 6B4 stains the basement membrane zone of ducts and acini of salivary gland, kidney tubules, epithelium of colonic crypts and weakly stains sweat glands and sebaceous glands.</p> <p>A broad species reactivity is expected because of the conserved nature of the epitope.</p> <p><b>Species:</b> Human.</p> <p>Other species not tested.</p> |
| <b>Storage:</b>          | <p>Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.</p> <p>Avoid repeated freeze-thaw cycles.</p> <p>Shelf life: One year from despatch.</p>                                                                                                                                                                                                                                                          |
| <b>General Readings:</b> | <p>1. Hogervorst F, Admiraal LG, Niessen C, Kuikman I, Janssen H, Daams H, et al. Biochemical characterization and tissue distribution of the A and B variants of the integrin alpha 6 subunit. J Cell Biol. 1993 Apr;121(1):179-91. PubMed PMID: 7681434.</p>                                                                                                                                                                    |
| <b>Pictures:</b>         | <p>Immunostaining of Human ovarian carcinoma cells (cell line:OVCAR-3)</p>                                                                                                                                                                                                                                                                                                                                                        |

