

Anti-CD49b [16B4]

Catalogue number: 152483

Tool type:

Contributor

Inventor: Martin Humphries

Institute: University of Manchester

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-CD49b [16B4]

Alternate name: Integrin Subunit Alpha 2; Alpha 2 Subunit Of VLA-2 Receptor; Platelet Membrane Glycoprotein Ia; CD49 Antigen-Like Family Member B; Collagen Receptor; CD49B; GPIa; Very Late Activation Protein 2 Receptor; Alpha-2 Subunit; Human Platelet Alloantigen System; Platelet Glycoprotein GPIa; VLA-2 Subunit Alpha; CD49b Antigen; HPA-5; VLA-2; VLAA2; BR

Class: Monoclonal

Conjugate: Unconjugated

Description: CD49b is an integrin alpha subunit which makes up half of the $\alpha 2 \beta 1$ integrin duplex. Integrins are heterodimeric integral membrane glycoproteins composed of a distinct alpha chain and a common beta chain. They are found on a wide variety of cell types including, T cells (the NKT cells), NK cells, fibroblasts and platelets. Integrins are involved in cell adhesion and also participate in cell-surface mediated signalling.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1

Reactivity: Human

Selectivity:

Host: Mouse

Immunogen: Purified human beta 1 preparation from HT1080 fibrosarcoma cell extract.

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: In IF, this antibody gave a positive signal in HepG2 cells.

Bacterial resistance:

Selectable markers:

Additional notes:

Patient details

Cancer subtype:

Cancer stage/grade:

Biopsy site:

Patient ethnicity:

Treatment history:

Engraftment details

Mice passaged?:

Engraftment site:

Sample type:

Host strain:

Histology:

Genetic data:

CancerTools.org

Target details

Target: CD49f (Integrin $\alpha 2 + \beta 1$)

Target alternate names:

Target background: CD49b is an integrin alpha subunit which makes up half of the $\alpha 2 \beta 1$ integrin duplex. Integrins are heterodimeric integral membrane glycoproteins composed of a distinct alpha chain and a common beta chain. They are found on a wide variety of cell types including, T cells (the NKT cells), NK cells, fibroblasts and platelets. Integrins are involved in cell adhesion and also participate in cell-surface mediated signalling.

Molecular weight:

Ic50:

Applications

Application: ELISA ; FACS ; IHC ; IF ; IP

Application notes:

Handling

Format:

Liquid

Concentration: 1 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS with 0.02% azide

Storage conditions: -15° C to -25° C

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Chen et al. 2009. PLoS One. 4(8):e6565. PMID: 19668337. ; MMP7 shedding of syndecan-1 facilitates re-epithelialization by affecting alpha(2)beta(1) integrin activation. ; Yamamoto et al. 2009. Endocrinology. 150(2):990-9. PMID: 18845630. ; N-acetylglucosaminyltransferase V regulates extravillous trophoblast invasion through glycosylation of alpha5beta1 integrin. ; Yamamoto et al. 2007. Br J Cancer. 97(11):1538-44. PMID: 17971775. ; Expression of N-acetylglucosaminyltransferase V in endometrial cancer correlates with poor prognosis. ; Cavallo-Medved et al. 2005. J Cell Sci. 118(Pt 7):1493-503. PMID: 15769846. ; Caveolin-1 mediates the expression and localization of cathepsin B, pro-urokinase plasminogen activator and their cell-surface receptors in human colorectal carcinoma cells. ; Avizienyte et al. 2002. Nat Cell Biol. 4(8):632-8. PMID: 12134161. ; Src-induced de-regulation of E-cadherin in colon cancer cells requires integrin signalling. ; Iba et al. 2000. J Cell Biol. 149(5):1143-56. PMID: 10831617. ; The cysteine-rich domain of human ADAM 12 supports cell adhesion through syndecans and triggers signaling events that lead to beta1 integrin-dependent cell spreading. ; Mould et al. 1998. Biochem J. 331 (Pt 3):821-8. PMID: 9560310. ; Regulation of integrin function: evidence that bivalent-cation-induced conformational changes lead to the unmasking of ligand-binding sites within integrin alpha5 beta1. ; Mould et al. 1995. Biochem Soc Trans. 23(3):395S. PMID: 8566283. ; Regulation of integrin alpha 5 beta 1 function by anti-integrin antibodies and divalent cations. ; Mould et al. 1995. FEBS Lett. 363(1-2):118-22. PMID: 7537221. ; Identification of a novel anti-integrin monoclonal antibody that recognises a ligand-induced binding site epitope on the beta 1 subunit.