Anti-Integrin beta-3 [Y2/51] Standard Size Ab01334-10.0

Developed in partnership with Ximbio (www.ximbio.com).

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Kappa
Clone Number: Y2/51
Alternative Name(s) of Target: Integrin b3; Platelet membrane glycoprotein IIIa; GPIIIa; CD61; GP3A; INGRB3; ITG B3; ITGB3; Integrin β3
UniProt Accession Number of Target Protein: P05106
Published Application(s): FACS, WB, IF, IHC
Published Species Reactivity: Human
Immunogen: This antibody was raised by immunising Balb/c mice with PHA-stimulated peripheral blood cells and subsequent fusing spleen cells and NSI myeloma cells.
Specificity: This antibody recognises integrin beta-3 which is a receptor for multiple ligands, such as laminin, fibronectin, prothrombin and others. It is involved in platelet-platelet interactions leading to a blood clot creation. Mutations in this protein are known to be a cause of Glanzmann thrombasthenia, the most common genetic disease of platelets.
Application Notes: This antibody has been extensively used as a marker of megakaryocytes. It is very effective in the immunohistochemical detection of platelets and megakaryocytes in formalin-fixed tissue samples as well as via Western blot and was also recommended for the identification of blood clots in blood vessels (Gatter et al., 1988). Y2/51 antibody has been also found useful in characterisation of other cells and tissues. For instance, one group used it (in concert with other antibodies) to compare immunohistochemically fibroblasts from normal and ruptured human anterior cruciate ligaments for tissue engineering purposes (Brune et al., 2007). Finally, another group performed immunofluorescence staining of HCT15 cells with this antibody and noted increased Integrin beta-3 expression in butyrate-preselected cells in a study on the acquisition of butyrate-resistance by colon cancer cells (Serpa et al., 2010).
Antibody First Published in: Gatter et al. The immunohistological detection of platelets, megakaryocytes and thrombi in routinely processed specimens. Histopathology. 1988 Sep;13(3):257-67. PMID:3192191
Note on publication: This article describes generation and characterisation of Y2/51 antibody.

Product Form

Size: 200 µg Purified antibody.
Purification: Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.