Anti-CD18 [H52] Standard Size Ab02054-1.1

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG2a format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG1, Kappa
Clone Number: H52
Alternative Name(s) of Target: ITGB2; MFI7; Integrin beta-2; Cell surface adhesion glycoproteins LFA-1/CR3/p150.95 subunit beta; Complement receptor C3 subunit beta; β2-subunit of leukocyte integrins
UniProt Accession Number of Target Protein: P05107
Published Application(s): inhibit, IP, Block, FC
Published Species Reactivity: Dog, Pig, Human
Immunogen: The original antibody was generated by immunizing BALB/c mice with human splenic adherent cells and later boosted with the same type of cells.
Specificity: This antibody binds disulfide-bonded loop (C386and C400) in the beta-2 integrin subunit. It is reported that the epitope of H52 is masked in the integrin Mac-1 and p150,95.
Application Notes: This antibody is successfully capable of inhibiting T cell, natural killer cells and complement receptor type 3 functions. Binding specificity of this antibody was confirmed with immunoprecipitation (PMID: 2580022). H52 mAb blocked 8E5-PHA-blast fusion in a dose-dependent manner with complete inhibition observed at concentrations above 3 µg/ml. Cell fusion (syncytium formation) is a major cytopathic effect of infection by human immunodeficiency virus (HIV). To determine the effect of the mAb on syncytium formation the LFA-1 expression of 8E5 cells and PHA-blasts was checked by flow cytometry. This mAb inhibited HIV-induced syncytium formation, however it did not block binding of gp120 to CD4 (PMID: 2543075). This mAb cross reacts with procine LFA-1 and profoundly inhibited mitogenic and allogenic stimulation of porcine T lymphocytes as well as cytotoxic T cell and natural killer (NK) cell function (PMID: 2481234). The expression of H52 epitope on beta-2 subunit isdependent on its interation with different alpha subunits of the leukocyte integrin LFA-1, Mac-1 and p150,95 and presence of calcium ions. The expression of the H52 epitope was examined by immunoprecipitation (PMID: 9808198).
Antibody First Published in: Hildreth et al. The Human Lymphocyte Function-Associated (HLFA) Antigen and a Related Macrophage Differentiation Antigen (HMac-1): Functional Effects of Subunit-Specific Monoclonal Antibodies J Immunol (1985);134(5):3272-80. PMID:2580022
Note on publication: Describes the structural and functional relationship between alpha and beta subunits of HLFA and HMac-1 with use of 5 antibodies that react with these proteins.

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.