

Anti-CD71 [OKT9] Standard Size Ab02334-23.0

This chimeric rabbit 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: Rabbit IgG, Kappa

Clone Number: OKT9

Alternative Name(s) of Target: Transferrin receptor protein 1; TFRC; TR; TfR; TfR1; Trfr; T9; p90

UniProt Accession Number of Target Protein: P02786

Published Application(s): Depletion, functional assay, WB, FC

Published Species Reactivity: Human

Immunogen: This antibody was raised by immunizing CAF mice with human thymocytes.

Specificity: This antibody is specific for the Transferrin receptor protein 1. Transferrin receptor is necessary for development of erythrocytes and the nervous system (By similarity). A second ligand, the heditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. Positively regulates T and B cell proliferation through iron uptake (PubMed:26642240). Acts as a lipid sensor that regulates mitochondrial fusion by regulating activation of the JNK pathway.

Application Notes: Lysis of Lymphoid Populations was tested with this antibody and rabbit complement (Reinherz et al, 1980; pmid:6966400). Human thymocytes and peripheral T cells were analyzed using flow cytometry with this antibody (Reinherz et al, 1980; pmid:6966400). This antibody is able to deplete the A24-binding protein from U937 cell lysates (Moura et al, 2001; pmid:11514599). Tumor cells from lymph node or bone marrow aspirate or homogenized tumor sample were used in a flow cytometry experiment with this antibody (Feremans et al, 1991; pmid:1996560). A double labeling with this antibody and phycoerythrin-conjugated anti-CD 19 was preformed on a human patient (Feremans et al, 1991; pmid:1996560). This antibody was used for immunoblotting on Fibrosarcoma cell line HT1080 and epidermoid carcinoma line A431 (Claas et al, 2001; pmid:11113129). Cells from heparinized bone marrow were used for flow cytometry using this antibody (Krystal et al, 1994). Flow cytometry was preformed with this antibody on H3396 and Karpas 299 cells (Klussman et al, 2004; pmid:15264863). A cytotoxic assay was preformed with this antibody on H3396 and Karpas 299 cells (Klussman et al, 2004; pmid:15264863).

Antibody First Published in: Reinherz et al. Discrete stages of human intrathymic differentiation: Analysis of normal thymocytes and leukemic lymphoblasts of T-cell lineage Proc Natl Acad Sci U S A. 1980 Mar;77(3):1588-92. PMID:6966400

Note on publication: A series of monoclonal antibodies was used to define three discrete stages of

human intrathymic T-cell differentiation.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified **Supplied In:** PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

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.