

Anti-CD70 [TAN1-6] Standard Size Ab01056-2.0

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

Isotype and Format: Mouse IgG2a, Kappa

Clone Number: TAN1-6

Alternative Name(s) of Target: TNFSF7; CD27 ligand; CD27-L; Cd27l; CD27LG; CD70 antigen; Ki-24 antigen; Tnfsf7; tumor necrosis factor (ligand) superfamily, member 7; Tumor necrosis factor ligand

superfamily member 7

UniProt Accession Number of Target Protein: 055237

Published Application(s): Blocking, WB, FC, IF

Published Species Reactivity: Mouse

Immunogen: This antibody was raised by immunising LOU rats with soluble recombinant CD70:Fc fusion

protein

Specificity: This antibody is specific for murine CD70, a 30-33 kDa type II transmembrane glycoprotein. CD70 is a member of the TNF family and is expressed by activated mouse T and B lymphocytes. Interaction of CD70 with CD27, its ligand on T cells, is important in T-B cell crosstalk and plays a role in costimulation and immune regulation.

Application Notes: This antibody has been used in various FACS analyses to reveal a critical role for CD70 in CD8 T cell priming by CD40-licensed antigen-presenting cells (Taraban et al, 2004), to demonstrate the differential requirement for CD70 and CD80/CD86 in dendritic cell-mediated activation of tumor-tolerized CD8 T cells (Bak et al, 2012), to examine how temporal changes in dendritic cell subsets, cross-priming and costimulation via CD70 control CD8(+) T cell responses to influenza (Ballesteros-Tato et al, 2010), and to show that CD70 is downregulated by interaction with CD27 (Kuka et al, 2013). In addition, this antibody has been used in vivo to block the CD70-CD27 interaction as part of the two studies examining how CD70 is critically required for the priming of CD8+ T cells (Taraban et al, 2004; Taraban et al, 2006).

Antibody First Published in: Taraban Vadim et al. Cutting edge: a critical role for CD70 in CD8 T cell priming by CD40-licensed APCs. J Immunol. 2004 Dec 1;173(11):6542-6. PMID:15557144

Note on publication: Describe the original generation of this antibody and its subsequent use in FACS and in vivo experiments to demonstrate the critical role for CD70 in CD8 T cell priming by CD40-licensed antigen-presenting cells.

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.