

Anti-CD40 [2C5] Standard Size Ab01617-23.0

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: 2C5

Alternative Name(s) of Target: CD40L receptor; CDw40; Bp50; B-cell surface antigen CD40; Tumor necrosis factor receptor superfamily member 5

UniProt Accession Number of Target Protein:

Published Application(s): agonist, immune activation, FC, IF

Published Species Reactivity: Chicken

Immunogen: This antibody was raised by immunising mice with a recombinant protein corresponding to the extracellular domain of chicken CD40 (chCD40ED).

Specificity: This antibody recognises extracellular domain of chicken CD40. CD40, an integral membrane glycoprotein of the TNF-receptor superfamily, is expressed mainly on professional antigen-presenting cells (APCs), including B-cells, macrophages, and dendritic cells. However, high levels of CD40 can also be detected on a wide range of tumor cells of the bladder, breast, and ovary.

Application Notes: 2C5 antibody is a CD40 agonist and can be used to induce immune activation. Agonistic monoclonal anti-CD40 antibodies (mAbs) mimic the effects of CD40L on APCs, leading to enhanced T-cell priming and expansion, increased antibody production and class switching. This antibody was shown to be a powerful adjuvant eliciting a strong IgG-response in chicken what makes it an important agent in vaccines development (Chen et al., 2012). Furthermore, 2C5 was also demonstrated to be effective in detecting CD40 via immunofluorescence as well as via flow cytometry in chicken B cells and macrophages (Chen et al., 2010). Finally, this antibody was observed to activate NO synthesis in HD11 macrophages, and stimulate DT40 B-cell proliferation (Chen et al., 2010).

Antibody First Published in: Chen et al. Production and characterization of agonistic monoclonal antibodies against chicken CD40. Dev Comp Immunol. 2010 Nov;34(11):1139-43. doi: 10.1016/j.dci.2010.06.014. Epub 2010 Jul 3. [PMID:20599554](#)

Note on publication: This article describes the generation and characterisation of 2C5 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 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.