

Product datasheet for TA386415

Cd40 Rat Monoclonal Antibody [Clone ID: FGK45]

Product data:

Product Type: Primary Antibodies

Clone Name: FGK45

Applications: FC, FN, WB

Reactivity: Mouse

Host: Rat

Isotype: IgG2a, kappa
Clonality: Monoclonal

Immunogen: The original rat IgG2a antibody was raised against the recombinant mouse CD40 fusion

protein.

Specificity: This antibody recognizes CD40. It is a type I transmembrane glycoprotein that belongs to the

tumor necrosis factor receptor (TNFR) superfamily. CD40 is expressed broadly on antigenpresenting cells (APCs) such as dendritic cells, B cells, macrophages, and monocytes as well as non-immune endothelial cells, basal epithelial cells, and a range of tumors. Upon binding to its ligand CD154, CD40 acts as a costimulatory molecule for the activation of B cells,

dendritic cells, monocytes, and other APCs.

FGK45 is an agonistic antibody that has been shown to activate CD40 expressing antigen presenting cells (APCs) what might promote anti-tumor T cell responses. For instance, the rat IgG2a version of this antibody was used to promote maturation of APCs what improved the ability of the macrophages to fight a tumour (Luheshi et al., 2016; pmid: 26918344). Another group used the same antibody to stimulate T-cells in a study on a tumor vaccine (Bartkowiak et al., 2015; pmid: 26351680). Others used ths clone as well to induce potent anti-tumor activity (Carmi et al., 2015; pmid: 25924063). On the other hand, it can also be used to inhibit CD40/CD154 interaction in vitro and in vivo. Furthermore, this clone can be also utilized to identify CD40-positive cells by flow cytometry (Rolink et al., 1996; pmid: 8885865).

Administering this antibody can be also utilized to induce inflamatory bowel disease-like characteristics and create a mouse IBD model to study this class of diseases (Bauche et al.,

2018; pmid: 30097293).

Formulation: PBS with 0.02% Proclin 300.

Concentration: lot specific



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Conjugation: Unconjugated

Storage: Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid

freeze and thaw cycles.

Stability: 3 years from dispatch.

Gene Name: CD40 antigen

Database Link: Entrez Gene 21939 Mouse

P27512

Synonyms: Bp50; CDW40; MGC9013; p50; TNFRSF5