

## **Product datasheet for CF813211**

# **OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

### CD40 Mouse Monoclonal Antibody [Clone ID: OTI3A7]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3A7

Applications: FC

Recommended Dilution: FLOW 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human CD40 (NP\_001241) produced in HEK293T

cell

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 30.62 kDa

**Gene Name:** CD40 molecule

Database Link: NP 001241

Entrez Gene 958 Human

P25942





#### Background:

This gene is a member of the TNF-receptor superfamily. The encoded protein is a receptor on antigen-presenting cells of the immune system and is essential for mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and germinal center formation. AT-hook transcription factor AKNA is reported to coordinately regulate the expression of this receptor and its ligand, which may be important for homotypic cell interactions. Adaptor protein TNFR2 interacts with this receptor and serves as a mediator of the signal transduction. The interaction of this receptor and its ligand is found to be necessary for amyloid-beta-induced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogenesis. Mutations affecting this gene are the cause of autosomal recessive hyper-lgM immunodeficiency type 3 (HIGM3). Multiple alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Nov 2014]

**Synonyms:** Bp50; CDW40; p50; TNFRSF5

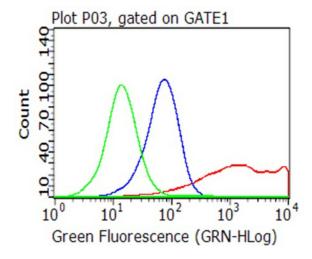
**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: Allograft rejection, Asthma, Autoimmune thyroid disease, Cell adhesion molecules (CAMs),

Cytokine-cytokine receptor interaction, Primary immunodeficiency, Systemic lupus

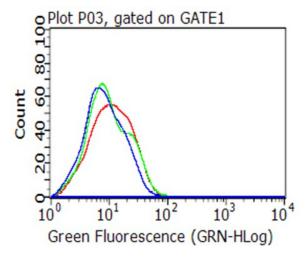
erythematosus, Toll-like receptor signaling pathway, Viral myocarditis

# **Product images:**

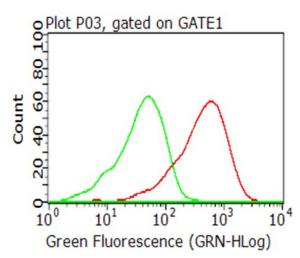


Flow cytometric analysis of living 293T cells transfected with CD40 overexpression plasmid ([RC201977]), Red)/empty vector ([PS100001], Blue) using anti-CD40 antibody ([TA813211]). Cells incubated with a non-specific antibody (Green) were used as isotype control (1:100).

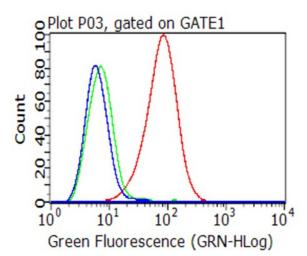




Flow cytometric analysis of living Jurkat cells, using anti-CD40 antibody ([TA813211], Red), compared to an isotype control (green), and a PBS control (blue) (1:100).



Flow cytometric analysis of living Raji cells, using anti-CD40 antibody ([TA813211], Red), compared to an isotype control (green) (1:100).



Flow cytometric analysis of living Ramos cells, using anti-CD40 antibody ([TA813211], Red), compared to an isotype control (green), and a PBS control (blue) (1:100).