



Datasheet for ABIN968495
anti-CD40 antibody (AA 71-187)



[Go to Product page](#)

4 Images

3 Publications

Overview

Quantity:	150 µg
Target:	CD40
Binding Specificity:	AA 71-187
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD40 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human CD40 aa. 71-187
Clone:	41-CD40
Isotype:	IgG1
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us for technical protocols.3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target: CD40

Alternative Name: CD40 ([CD40 Products](#))

Background: CD40, a member of the TNF receptor family, contains a cysteine-rich N-terminal domain and a Ser/Thr-rich region preceding the transmembrane domain. On B cells, signaling through CD40 induces cell growth and differentiation, mediates cell survival within the germinal center, and upregulates the expression of costimulatory and adhesion molecules, such as B7.1, B7.2, and ICAM-1. The interaction of CD40 on B cells and CD40L on activated CD4+ T cells is essential for immune functions, such as immunoglobulin class switching. Signal transduction through CD40 pathways involves interaction with proteins such as TRAFs (TRAF2, TRAF3, TRAF5, and TRAF6), Jak 3, and Tyr phosphorylation of proteins, such as Lyn, Syk, PI-3-kinase, STAT3, and STAT5. In TRAF2-deficient mice, CD40-mediated B cell proliferation and NFkappaB activation are defective. Ku70 and Ku80 associate with the membrane-proximal region of CD40 in human primary B cells and the engagement of CD40 leads translocation of Ku proteins to the nucleus. Thus, CD40 interacts with a variety of signal transducers which mediate its role in B cell survival, growth, differentiation, and immunoglobulin class switching.

Molecular Weight: 44 kDa

Pathways: [NF-kappaB Signaling](#), [Cellular Response to Molecule of Bacterial Origin](#), [M Phase](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Cancer Immune Checkpoints](#)

Application Details

Comment: Related Products: ABIN968584, ABIN967389

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 250 µg/mL

Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

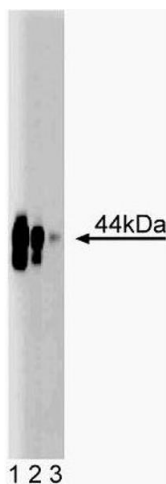
Storage: -20 °C

Storage Comment: Store undiluted at -20°C.

Publications

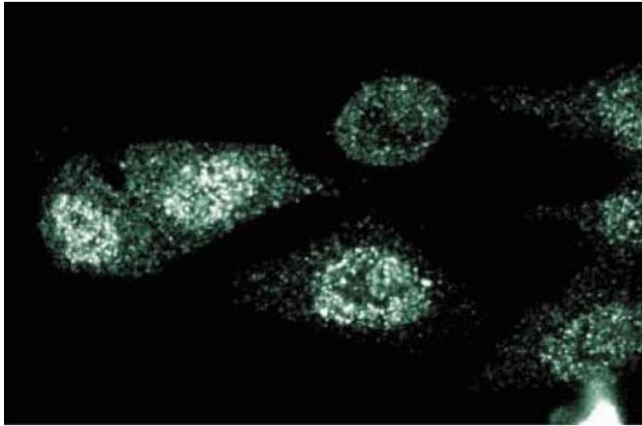
- Product cited in:
- Morio, Hanissian, Bacharier, Teraoka, Nonoyama, Seki, Kondo, Nakano, Lee, Geha, Yata: "Ku in the cytoplasm associates with CD40 in human B cells and translocates into the nucleus following incubation with IL-4 and anti-CD40 mAb." in: **Immunity**, Vol. 11, Issue 3, pp. 339-48, (1999) ([PubMed](#)).
- Nguyen, Duncan, Mirtsos, Ng, Speiser, Shahinian, Marino, Mak, Ohashi, Yeh: "TRAF2 deficiency results in hyperactivity of certain TNFR1 signals and impairment of CD40-mediated responses." in: **Immunity**, Vol. 11, Issue 3, pp. 379-89, (1999) ([PubMed](#)).
- Randall, Heath, Santos-Argumedo, Howard, Weissman, Lund: "Arrest of B lymphocyte terminal differentiation by CD40 signaling: mechanism for lack of antibody-secreting cells in germinal centers." in: **Immunity**, Vol. 8, Issue 6, pp. 733-42, (1998) ([PubMed](#)).

Images



Western Blotting

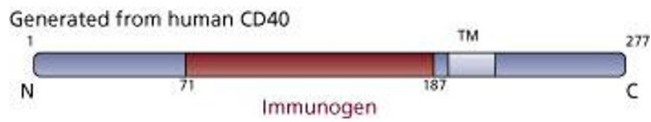
Image 1. Western blot analysis of CD40 on EB1 cell lysate. Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10000 dilution of anti-CD40.



Immunofluorescence

Image 2. Immunofluorescent staining of HeLa cells.

Image 3.



Please check the [product details page](#) for more images. Overall 4 images are available for ABIN968495.