

CD40 recombinant antibody

Anti-CD40 [A54 scFv]

CATALOG # AAA72042	REACTIVITY Human	APPLICATIONS ELISA
------------------------------	----------------------------	------------------------------

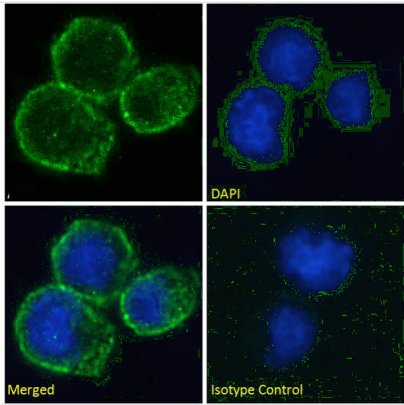
PRODUCT SYNONYMS

CD40; Monoclonal Recombinant Antibody; Anti-CD40 [A54 scFv]; TNFRSF5; A54; Tumor necrosis factor receptor superfamily member 5; B cell surface antigen CD40; B-cell cell surface antigen CD40; B-cell surface antigen CD40; antigen CD40; CD40 antigen; Bp50; Bp-50; CD40L receptor CDw40; CD40 recombinant antibody

PRODUCT SPECIFICATIONS

Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG lambda
Clone Number	A54 scFv
Specificity	A54 binds specifically to the D1 domain of CD40 (and can only bind to the intact i.e. non-truncated version of CD40 and when an AD2 peptide tag has not been added) and can recognise CD40 on a B cell line (BJAB). This scFv binds to CD40 (immobilized by amine coupling) with a KD within the range of 40nM. CD40 is a glycoprotein of the TNFR superfamily and is expressed on all mature B cells, dendritic cells, activated monocytes, some endothelial cells and some epithelium including the thymus. CD40 binds to the membrane protein CD154 of the TNF superfamily and this interaction is required for the secondary immune responses and germinal centre formation.
Purity/Purification	Protein A Affinity Purified
Form/Format	PBS only with 0.02% Proclin 300.
Concentration	1mg/ml (varies by lot)
Sequence Length	277
Applicable Applications for CD40 recombinant antibody	Blocking, ELISA
Immunogen	A54 human anti-CD40 scFv was selected from the n-CoDeR phage display library after 4 rounds of selections using biotinylated CD40-Fcγ fusion protein as bait and subsequent capture of bound phages on streptavidin-coated magnetic beads.
Clone Note	A54 is able to block the CD40-CD154 interaction by around 60-80% and can also induce CD40 signalling in human B cells when at 'unusually high concentrations' (The CD40 receptor - target, tool and technology, Ellmark, 2002). This scFv can also be used for ELISA studies (PMID: 12153507)
Preparation and Storage	Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

IMAGES



IF (Immunofluorescence)
Immunofluorescence staining of fixed Daudi cells with anti-CD40 antibody A54 scFv
Immunofluorescence analysis of paraformaldehyde fixed Daudi cells on Shi-fix coverslips, permeabilized with 0.15% Triton and stained with the chimeric rabbit IgG version of A54 scFv (AAA72042) at 10 ug/ml for 1h followed by Alexa Fluor 488 secondary antibody (1 ug/ml), showing membrane staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom AAA72042, DAPI, merged channels and an isotype control. The isotype control was stained with an anti-Fluorescein antibody followed by Alexa Fluor 488 secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for CD40 recombinant antibody	This full-length, chimeric rabbit antibody was made using the variable domain sequences of the original Human scFv format, for improved compatibility with existing reagents, assays and techniques.
Product Categories/Family for CD40 recombinant antibody	Autoimmune ; Autoimmune Encephalomyelitis (EAE) , Inflammation
References	Ellmark et al. In vitro molecular evolution of antibody genes mimicking receptor revision Mol Immunol. 2002 Oct;39(5-6):349-56. PMID:12220892 Original Published Journal: Mol Immunol. 2002 Oct;39(5-6):349-56. Original Published Journal: Mol Immunol. 2002 Oct;39(5-6):349-56. Publication Note: Describes the creation of an interactive library based on 4 similar scFv clones (of which one is A54) using the CDR shuffling principle.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507581
NCBI GeneID	958
NCBI Accession #	NP_001241.1
NCBI GenBank Nucleotide #	NP_001241.1
UniProt Accession #	P25942
NCBI Official Full Name	tumor necrosis factor receptor superfamily member 5 isoform 1
NCBI Official Synonym Full Names	CD40 molecule
NCBI Official Symbol	CD40
NCBI Official Synonym Symbols	p50; Bp50; CDW40; TNFRSF5
NCBI Protein Information	tumor necrosis factor receptor superfamily member 5
UniProt Protein Name	Tumor necrosis factor receptor superfamily member 5
UniProt Gene Name	CD40
UniProt Synonym Gene Names	TNFRSF5

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/monoclonal/cd40-recombinant-antibody-clone-a54-scfv-elisa/72042>