

Mouse anti-Human CD137/4-1BB/TNFRSF9 Monoclonal Antibody | anti-TNFRSF9 antibody

CD137/4-1BB/TNFRSF9

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA23920	Mouse	Human	ELISA, Immunofluorescence, Flow Cytometry, Functional Assay, Immunohistochemistry

PRODUCT SYNONYMS

CD137/4-1BB/TNFRSF9; Monoclonal Antibody; 4-1BB Ligand Receptor T Cell; Antigen 4-1BB Homolog; CDw137; HLDA VI; Homolog of Mouse 4 1BB; induced by lymphocyte activation (ILA); Interleukin activated receptor homolog of Mouse Ly63; T-cell antigen 4-1BB/ILA homolog; Tumor necrosis factor receptor superfamily member 9; anti-TNFRSF9 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	4-1BB/3201
Specificity	CD137 belongs to the tumor necrosis factor receptor family and delivers a costimulatory signal to T lymphocytes. It is expressed on activated T cells and binds an inducible ligand that is found on B cells, macrophages and dendritic cells. Interactions between CD137 and its ligand are involved in antigen presentation and the generation of cytotoxic T cells. CD137 antibody may improve cancer treatment, and has been implicated in breast cancer, melanoma and lymphoma.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	255
Applicable Applications for anti-TNFRSF9 antibody	ELISA, IF (Immunofluorescence), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry)
Application Notes	ELISA: For coating, order antibody without BSA IF: 1-2ug/ml FC/FACS: 1-2ug/million cells Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT) (Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes)
Positive Control	HEK293 cells, Jurkat whole cell lysate or recombinant human CD137 protein (WB). Human kidney cancer, liver, stomach or thyroid cancer tissue (IHC-P). Expressed on the surface of activated T- cells.
Immunogen	A recombinant fragment (around aa 19-188) of human CD137/4-1BB/TNFRSF9 protein (exact sequence is proprietary)
Cellular Localization	Cell Surface
Hu-chromosome Location	1p36.23
Preparation and Storage	Antibody with azide: store at 2 to 8 degree C. Antibody without azide: store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



Application Data

Analysis of Protein Array containing more than 19,000 full-length human proteins using CD137-Monospecific Mouse Monoclonal Antibody (4-1BB/3201). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



IF (Immunofluorescence)

Immunofluorescent staining of MeOH-fixed HEK293 cells. CD137-Monospecific Mouse Monoclonal Antibody (4-1BB/3201) followed by goat anti-Mouse IgG-CF488 (Green). Nuclei are stained with Reddot (red).



FCM (Flow Cytometry)

Flow Cytometric Analysis of MeOH-fixed HEK293 cells. CD137-Monospecific Mouse Monoclonal Antibody (4-1BB/3201) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Cerebellum stained with CD137-Monospecific Mouse Monoclonal Antibody (4-1BB/3201).



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Spleen stained with CD137-Monospecific Mouse Monoclonal Antibody (4-1BB/3201).



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with CD137-Monospecific Mouse Monoclonal Antibody (4-1BB/3201).

ADDITIONAL INFORMATION

References	Zhao S, et al. CD137 ligand is expressed in primary and secondary lymphoid follicles and in B-cell lymphomas: diagnostic and therapeutic implications. Am J Surg Pathol. 2013 Feb;37(2):250-8.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	5730095
NCBI GeneID	3604
NCBI Accession #	NP_001552.2
NCBI GenBank Nucleotide #	NP_001552.2
UniProt Accession #	Q07011
Molecular Weight	32kDa (monomer); 85kDa (dimer)
NCBI Official Full Name	tumor necrosis factor receptor superfamily member 9
NCBI Official Synonym Full Names	TNF receptor superfamily member 9
NCBI Official Symbol	TNFRSF9
NCBI Official Synonym Symbols	ILA; 4-1BB; CD137; CDw137
NCBI Protein Information	tumor necrosis factor receptor superfamily member 9

UniProt Protein Name	Tumor necrosis factor receptor superfamily member 9
UniProt Gene Name	TNFRSF9
UniProt Synonym Gene Names	CD137; ILA
UniProt Entry Name	TNR9_HUMAN

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.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/cd137-4-1bb-tnfrsf9-antibody-clone-4-1bb-3201-immunofluorescence-flow-cytometry-immunohistochemistry-elisa/23920>