

Mouse CD335 Monoclonal Antibody | anti-CD335 antibody

MOUSE ANTI BOVINE CD335:RPE

CATALOG # AAA49499	HOST Mouse	APPLICATIONS Flow Cytometry, Functional Assay
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PRODUCT SYNONYMS

CD335; Monoclonal Antibody; MOUSE ANTI BOVINE CD335:RPE; anti-CD335 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	AKS1
Form/Format	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilised
Sequence Length	308
Applicable Applications for anti-CD335 antibody	FCM/FACS (Flow Cytometry)
Reconstitution	Reconstitute with 1 ml distilled water Perservative Stabilisers
Immunogen	Fusion protein consisting of the extracellular region of bovine CD335. Fusion Partners
Target Species	Bovine
Preparation and Storage	Prior to reconstitution store at 4 degree C. Following reconstitution store at 4 degree C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf Life: 12 months from date of reconstitution.



Application Data

Published customer image: CD2 distribution on bovine NK cells in peripheral blood and during cell culture. (A) CD2 expression by PBMCs from healthy cattle, and in NKp46-selected cells cultured for the indicated time in the presence of 100U/ml rIL-2. Results were obtained by two-colour flow cytometry, gating for viable lymphocytes. Data shown are from one animal representative of 19. (B) Monitoring of cell divisions of CD2- and CD2+ NK cell populations during three and six days of rIL-2 (100U/ml) stimulation. NKp46-selected cells were labelled with CFSE the day after isolation and CFSE intensity (filled histograms) measured in flow cytometry on the indicated days, gating for CD2- or CD2+ viable cells. Solid line open histograms show non-dividing NK cells, cultured in the presence of 1U/ml rIL-2, while broken line open histograms show unlabeled stimulated NK cells. Data shown are from one animal representative of five. (C) Stability of CD2 expression in NK cell subsets cultured separately. NK cells separated with immunomagnetic beads for absence or presence of CD2 were cultured separately for eleven days in the presence of IL-2, monitoring CD2 expression at three different time points (filled histograms). Day 1 corresponds to the day of separation, 24 h after primary NK cell isolation. Open histograms show secondary mAb controls. Data shown are from one animal representative of eight.From: Boysen et al. BMC Immunology 2006 7:10.



Application Data

Published customer image: Oenothien B induces IL-2Ra or CD69 on bovine and human NK cells. (A) Bovine PBMCs (105 cells/well) were treated with 20 ug/ml oenothien B in X-VIVO medium for 24 hrs, and IL-2Ra expression on NK cells was measured by multi-color flow cytometry. Representative examples of two-color flow cytometry plots comparing IL-2Ra staining on oenothien B-treated and untreated bovine NK cells (CD335+) from each animal are shown. (B) Human PBMCs (105 cells/well) were treated with 40 ug/ml oenothien B in cRPMI medium for 48 hrs. CD69 expression on NK cells was then measured by flow cytometry. Representative examples of two-color flow cytometry plots comparing CD69 staining on oenothien B-treated and untreated human NK cells from each donor are shown.From: Ramstead AG, Schepetkin IA, Quinn MT, Jutila MA (2012) Oenothien B, a Cyclic Dimeric Ellagitannin Isolated from Epilobium angustifolium, Enhances IFN γ Production by Lymphocytes. PLoS ONE 7(11): e50546.



Application Data

Staining of bovine peripheral blood lymphocytes with Mouse anti Bovine CD335 followed by Goat anti Mouse IgG (H/L):FITC . A small positive peak representing NK cells can be identified



Application Data

Published customer image: Effect of anti-CD2 mAbs on bovine NK cell functions. (A) IFN- γ response from NK cells caused by cross-linking of CD2. Plastic wells were pre-coated with two different mAbs against bovine CD2, along with NKp46-mAb as positive control and CD8-mAb or medium as negative controls. rIL-2 activated NK cells were added and incubated for 24 h in the presence or absence of rIL-12 (0.5 U/ml), and IFN- γ content in the supernatants analyzed by an ELISA. Data shown are means $\pm$ SD of two to four individual animals. (B-C) IL-2 activated NK cell killing of the bovine target lines BL3.1 and MDBK in a 4 h ⁵¹Cr-release assay, with addition of the indicated mAbs for blocking. CD2mAb I = BAQ95A, CD2 mAb II = MUC2A, CD8 mAb = CACT80C, NKp46 mAb = AKS1. (D) As above, using murine Fc-receptor bearing P815 target cells to obtain a redirected lysis effect. Data shown in (B-D) are from one animal representative of three to five.From: Boysen et al. BMC Immunology 2006 7:10.



Application Data

Published customer image: Oenothien B Primes bovine CD335+ cells to respond to IL-18. (A) Bovine PBMCs (105 cells/well) were depleted of CD335+ cells and treated with 20 ug/ml oenothien B or X-VIVO medium alone for 24 hrs. Cells were then washed and treated with 10 ng/ml rhu IL-18 or medium alone for 18 hrs. After incubation, IFN γ levels in the supernatant fluids were measured by ELISA. The data are expressed as mean $\pm$ SEM of three independent experiments comparing depleted PBMCs to un-depleted controls tested concurrently. All samples were tested in duplicate or triplicate. Statistical significance was measured by Two-way ANOVA with Bonferroni post-test. *p

ADDITIONAL INFORMATION

Related Product Information for anti-CD335 antibody

Mouse anti Bovine CD335 antibody, clone AKS1 recognizes bovine CD335, also known as NKp46 and Natural cytotoxicity triggering receptor 1. CD335 is a type I transmembrane protein, with two extracellular C2-type immunoglobulin-like domains, which functions as an activating receptor. CD335 is expressed by human natural killer cells (Sivori et al. 1997). The bovine homologue is expressed on bovine NK cells (Storset et al. 2004) and no expression of CD335 has been detected on B cells, T cells, monocytes or granulocytes. Clone AKS1 is reported to activate lysis of Fc γ R-expressing cell line P815, by IL-2 activated NKp46+ cells (Storset et al. 2004).

NCBI AND UNIPROT INFORMATION

NCBI GI #	34365789
NCBI GeneID	369024
NCBI Accession #	NP_899209.1
NCBI GenBank Nucleotide #	NM_183365.1
UniProt Accession #	Q863H2
Molecular Weight	34,494 Da
NCBI Official Full Name	natural cytotoxicity triggering receptor 1
NCBI Official Symbol	NCR1
NCBI Official Synonym Symbols	NKP46
NCBI Protein Information	natural cytotoxicity triggering receptor 1; NK-p46; natural killer cell p46-related protein
UniProt Protein Name	Natural cytotoxicity triggering receptor 1
UniProt Gene Name	NCR1
UniProt Synonym Gene Names	NK-p46; NKp46
UniProt Entry Name	NCTR1_BOVIN

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/cd335-antibody-clone-aks1-flow-cytometry-elisa/49499>