

Mouse IFN GAMMA Monoclonal Antibody | anti-IFNG antibody

MOUSE ANTI BOVINE INTERFERON GAMMA

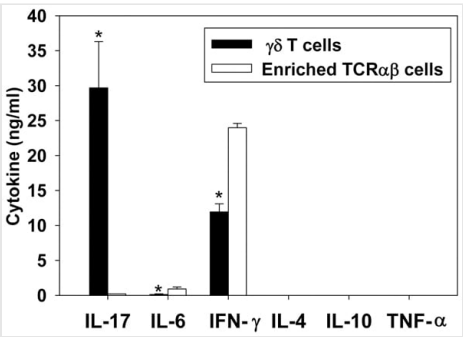
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA12093	Mouse	Dog, Dolphin, Ferret, Fin Whale, Goat, Horse, Human, Mink, Rabbit, Pig, Sheep. Based on sequence similarity, is expected to react with: Mustelid N.B. Antibody reactivity and working conditions may vary between species.	ELISA, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

IFN GAMMA; Monoclonal Antibody; MOUSE ANTI BOVINE INTERFERON GAMMA; anti-IFNG antibody

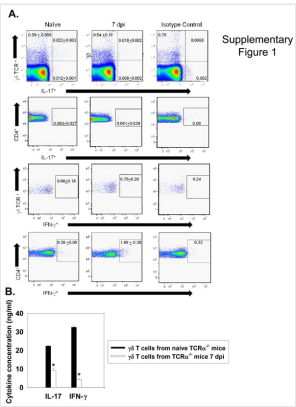
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Dog, Dolphin, Ferret, Fin Whale, Goat, Horse, Human, Mink, Rabbit, Pig, Sheep. Based on sequence similarity, is expected to react with: Mustelid N.B. Antibody reactivity and working conditions may vary between species.
Clonality	Monoclonal
Isotype	IgG1
Clone Number	CC302
Specificity	IFN Gamma
Form/Format	Purified IgG - liquid
Concentration	IgG concentration 1.0 mg/ml (varies by lot)
Sequence Length	166
Applicable Applications for anti-IFNG antibody	ELISA, FCM/FACS (Flow Cytometry)
Application Notes	Flow Cytometry: 1/100-1/500; Flow Cytometry: Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul. Application Note: Membrane permeabilization is required for this application. We recommend the use of Leucoperm. ELISA: Biotinylated mouse anti bovine IFN gamma, clone CC302, may be used as the detection reagent in a sandwich ELISA with purified mouse anti bovine IFN gamma, clone CC330, as the capture reagent and recombinant bovine IFN gamma as the standard.
Perservative Stabilizers	0.09% Sodium Azide (NaN ₃)
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Target Species	Bovine
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Preparation and Storage	Store at 4 degree C or at -20 degree C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.



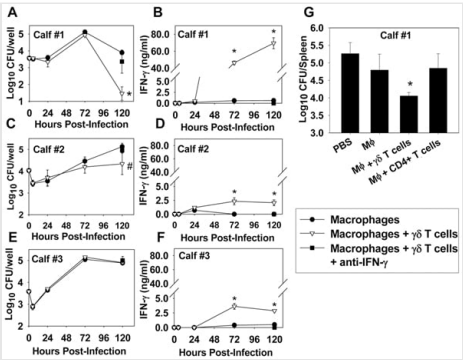
Application Data

Published customer image: gamma delta T cells are the primary source of IL-17 during *B. abortus* infection. C57BL/6 mice were infected i.p. with 5x10⁴ CFUs of *B. abortus* 2308, and two weeks later gamma delta T cells (>95% purity) and an enriched TCR $\alpha\beta$ (~55% CD4+, 25% CD8+) cell fraction were isolated from the spleens of infected mice. Cells were stimulated with 500 ng/ml ionomycin and 50 ng/ml PMA for three days, and cell-free supernatants from triplicate wells were assayed for cytokine production via ELISA. The mean $\pm$ SD is shown; * P



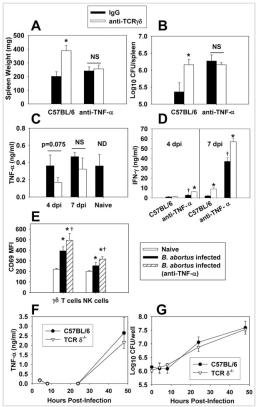
Application Data

Published customer image: *B. abortus* infection does not induce IL-17 or IFN- gamma production by gamma delta T cells. A. Splenocytes from naive or *B. abortus*-infected mice (7 dpi) were stimulated overnight with PMA/ionomycin and brefeldin A was added for the last 3 h of culture. Following surface staining, cells were permeabilized and stained for intracellular IL-17 or IFN- γ . Top panel, the proportion of IL-17 producing gamma delta T cells was determined following gating on lymphocytes. Second panel from top, cells were gated on CD4+ (CD3+) T cells and assayed for IL-17 production. Third panel from top, cells were gated on gamma delta T cells (CD3+/TCR gamma delta +) and assayed for IFN- gamma production. Bottom panel, cells were gated on CD4+ (CD3+) T cells and assayed for IFN- gamma production. Depicted is the mean $\pm$ SD of 5 mice/group and is representative of two independent experiments. B. gamma delta T cells were sorted from naive or *B. abortus*-infected (7 dpi) mice and stimulated for 72 h with PMA/ionomycin. Cytokine levels in supernatant were determined by ELISA. Depicted is the mean $\pm$ SD of triplicate wells. *P



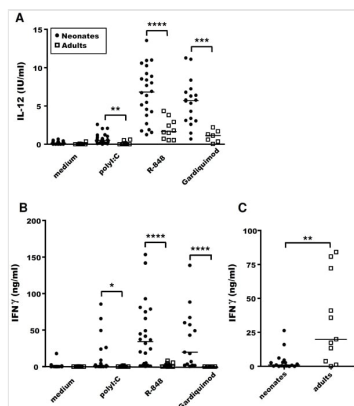
Application Data

Published customer image: Bovine gamma delta T cells impair *B. abortus* replication in autologous macrophages via IFN- gamma . A. -F. Bovine macrophages were infected with *B. abortus* (30 bacteria:1 macrophage) and then fresh media or media containing autologous gamma delta T cells were added to infected macrophages. A., C., E. Macrophage colonization (triplicate wells/treatment) was monitored over time. *P



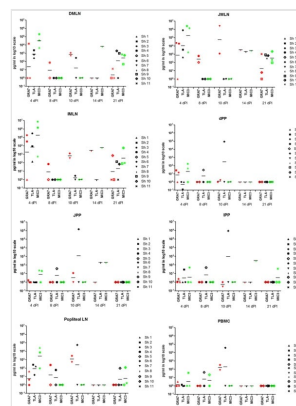
Application Data

Published customer image: gamma delta T cells require TNF-alpha to protect against *B. abortus* infection. C57BL/6 mice treated with anti-TCR gamma delta mAb or hamster IgG on day -1 and day 3 post-infection with 5x10⁴ CFUs of *B. abortus* 2308. Some mice were also neutralized of their TNF-alpha on days -1 and 3. Seven days after infection, A. splenic weights and B. extent of brucellae colonization were determined. The mean $\pm$ SEM of 10 mice/group is depicted; *P



Application Data

Published customer image: Comparative IL-12 and IFN&gamma responses of neonatal and adult MLN cells following TLR agonist stimulation. Neonatal (closed circles) and adult (open squares) MLN cells were cultured in vitro with or without 12.5 ug/ml polyI:C, 0.5 ug/ml R-848 or 5 ug/ml Gardiquimod. Supernatants were harvested after 48 h of culture and ELISA was carried out for IL-12 (A) and IFN? (B) secretion. Non-specific cell stimulation was also carried out with 50 ng/ml PMA combined with 500 ng/ml ionomycin, with the supernatants assayed for IFN? detection 48 h later (C). Each circle or square represents one neonate or one adult, respectively. Medians are shown for each stimulus. Non-parametric Mann-Whitney tests were used to compare data for neonates and adults: *p=0.01; **p=0.005; ***p=0.001; ****p=0.0005. From: Ferret-Bernard S, Remot A, Lacroix-Lamand© S, Metton C, Bernardet N, et al. (2010) Cellular and Molecular Mechanisms Underlying the Strong Neonatal IL-12 Response of Lamb Mesenteric Lymph Node Cells to R-848. PLoS ONE 5(10): e13705.



Application Data

Published customer image: IFN-gamma response (log10 scale) in mesenteric lymph nodes, Peyer's Patches, popliteal LN and PBMC against GRA7, TLA and MIC3 in function of time. From: Verhelst D, De Craeye S, Entrican G, Dorny P, Cox E. Parasite distribution and associated immune response during the acute phase of Toxoplasma gondii infection in sheep. BMC Vet Res. 2014 Dec 16;10(1):293.

ADDITIONAL INFORMATION

Related Product Information for anti-IFNG antibody

Mouse anti Bovine IFN gamma antibody, clone CC302, recognizes bovine interferon-gamma, a 143 amino acid cytokine with potent activating, antiviral and anti proliferative properties, produced as a pro-peptide with an additional 23 amino acid N-terminal signal peptide sequence having a molecular weight of ~20kDa. IFN gamma is predominantly secreted by activated T lymphocytes in response to specific mitogens as a result of infection (Rhodes et al. 2000). Mouse anti bovine gamma interferon antibody, clone CC302 has been demonstrated to be reactive to a number of mammalian species including human, sheep, dog, pig, goat and mink (Pedersen et al. 2002). Clone CC302 has been successfully used for the evaluation of gamma interferon levels in the sera of calves naturally infected with M. avium. subsp paratuberculosis (Appana et al. 2013) as a detection reagent using ELISA.

NCBI AND UNIPROT INFORMATION

NCBI GI #	31982949
NCBI GeneID	281237
NCBI Accession #	NP_776511.1
NCBI GenBank Nucleotide #	NM_174086.1
UniProt Accession #	P07353; A7L687; A9QWQ4
NCBI Official Full Name	interferon gamma
NCBI Official Synonym Full Names	interferon, gamma
NCBI Official Symbol	IFNG
NCBI Protein Information	interferon gamma; IFN-gamma; boIFNG; interferon gamma type 2; interferon-gamma
UniProt Protein Name	Interferon gamma
UniProt Gene Name	IFNG
UniProt Synonym Gene Names	BoIFNG; IFN-gamma
UniProt Entry Name	IFNG_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/ifn-gamma-antibody-clone-cc302-flow-cytometry-elisa/12093>