abcam

Product datasheet

Anti-Interferon gamma antibody [EPR21704] - BSA and Azide free ab231301

Recombinant RabMAb

1 References 5 Images

Overview

Product name	Anti-Interferon gamma antibody [EPR21704] - BSA and Azide free
Description	Rabbit monoclonal [EPR21704] to Interferon gamma - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, Flow Cyt, ELISA
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment within Human Interferon gamma aa 1 to the C-terminus. The exact sequence is proprietary. Database link: P01579
Positive control	Flow Cyt: NK-92 cells treated with 80 µM ab120297 PMA (Phorbol-12-myristate-13-acetate) and 3 µM Ionomycin for 5 hours, then 300 ng/ml BFA for 4 hours. IHC-P: NK-92 cells treated with 80 µM ab120297 PMA (Phorbol-12-myristate-13-acetate) and 3 µM Ionomycin for 5 hours, then 300 ng/ml BFA for 4 hours and human tonsil tissue.
General notes	Ab231301 is the carrier-free version of ab231036. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. ab231301 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21704
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab231301** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

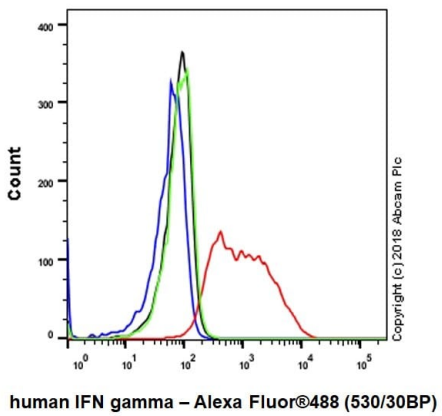
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 19 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration.
ELISA		Use at an assay dependent concentration.

Target

Function	Produced by lymphocytes activated by specific antigens or mitogens. IFN-gamma, in addition to having antiviral activity, has important immunoregulatory functions. It is a potent activator of macrophages, it has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I interferons.
Tissue specificity	Released primarily from activated T lymphocytes.
Involvement in disease	In Caucasians, genetic variation in IFNG is associated with the risk of aplastic anemia (AA) [MIM:609135]. AA is a rare disease in which the reduction of the circulating blood cells results from damage to the stem cell pool in bone marrow. In most patients, the stem cell lesion is caused by an autoimmune attack. T-lymphocytes, activated by an endogenous or exogenous, and most often unknown antigenic stimulus, secrete cytokines, including IFN-gamma, which would in turn be able to suppress hematopoiesis.
Sequence similarities	Belongs to the type II (or gamma) interferon family.
Post-translational modifications	Proteolytic processing produces C-terminal heterogeneity, with proteins ending alternatively at Gly-150, Met-157 or Gly-161.
Cellular localization	Secreted.

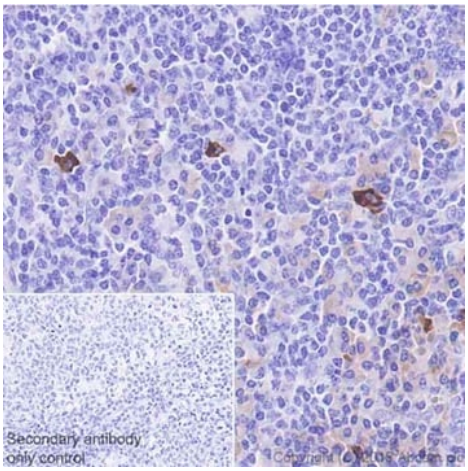
Images



Flow Cytometry - Anti-Interferon gamma antibody [EPR21704] - BSA and Azide free (ab231301)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized NK-92 (human malignant non-Hodgkin's lymphoma natural killer cell) cell line treated with 80 µM ab120297 PMA (Phorbol-12-myristate-13-acetate) and 3 µM Ionomycin for 5 hours, then 300 ng/ml BFA was added for 4 hours labeling Interferon gamma with ab231036 at 1/60 (red) and untreated control (green). Compared with a Rabbit monoclonal IgG-Isotype Control (ab172730) (black) and an unlabeled control (cells incubated with secondary anibody only) (blue). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077), at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab231036).



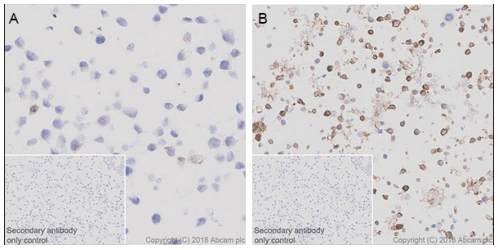
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Interferon gamma antibody [EPR21704] - BSA and Azide free (ab231301)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling Interferon gamma with ab231036 at 1/500 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) (ab97051). Sporadic cytoplasmic staining in limphocytes of human tonsil is observed (PMID: 21838712). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP) (ab97051).

Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab231036).



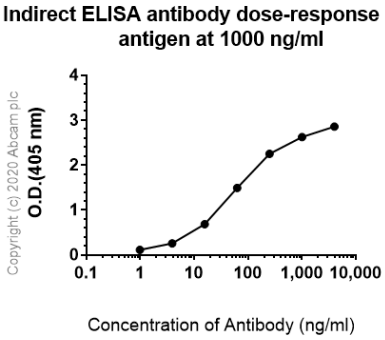
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Interferon gamma antibody [EPR21704] - BSA and Azide free (ab231301)

Immunohistochemical analysis of paraffin-embedded NK-92 cells labeling Interferon gamma with ab231036 at 1/500 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) (ab97051). Nearly no staining on untreated NK92 cells (A) and positive staining on treated NK92 cells (B) (treated with 80 µM ab120297 PMA (Phorbol-12-myristate-13-acetate) and 3 µM Ionomycin for 5 hours, then with 300 ng/ml BFA for 4 hours) is observed (PMID:23129404). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP) (ab97051).

Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab231036).



ELISA - Anti-Interferon gamma antibody [EPR21704] - BSA and Azide free (ab231301)

This data was developed using ab231036, the same antibody clone in a different buffer formulation.

ELISA analysis of Human IFN Gamma recombinant protein at 1000 ng/mL with ab231036. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.

Anti-Interferon gamma antibody [EPR21704] - BSA and Azide free (ab231301)

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