Product datasheet

Anti-Interferon gamma antibody ab25101

Overview

Product name: Anti-Interferon gamma antibody
Description: Rabbit polyclonal to Interferon gamma
Host species: Rabbit
Specificity: This antibody neutralizes both natural and recombinant human IFN gamma. Activity = 10^4 Neutralizing U/mg protein.
Tested applications: Suitable for: ELISA, ELISpot, Neutralising, ICC, WB, IHC-Fr, Sandwich ELISA, IHC-P
Species reactivity: Reacts with: Human, Macaque monkey
Immunogen: Recombinant human IFN gamma derived from E.coli.
Positive control: Purchase matching WB positive control: Recombinant Human Interferon gamma protein

Properties

Form: Liquid
Storage buffer: Constituent: 4.275% Trehalose
Purity: Immunogen affinity purified
Purification notes: The antibody was sequentially purified by ammonium sulphate precipitation and protein affinity chromatography. The antibody was then membrane filtered (0.2 µm) for sterility.
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab25101 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
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.

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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tr>
<td>ELISA</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>ELISpot</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>Neutralising</td>
<td></td>
<td>Use at an assay dependent concentration. In vitro neutralization. One Neutralizing Unit is defined as the total amount of antibodies sufficient for neutralizing one laboratory unit of recombinant Human IFNG (1 Unit = ~50 pg of pure Human IFNG). Activity ≥ 10^4 Neutralizing U/mg protein.</td>
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<tr>
<td>ICC</td>
<td></td>
<td>Use at an assay dependent concentration. Follow an intracellular staining protocol.</td>
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<tr>
<td>WB</td>
<td>★★★☆☆☆</td>
<td>Use at an assay dependent concentration. Predicted molecular weight: 19 kDa.</td>
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<td>IHC-Fr</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>Sandwich ELISA</td>
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<td>Use a concentration of 0.5 µg/ml. Can be paired for Sandwich ELISA with Mouse monoclonal [MD-1] to Interferon gamma (ab25014). For sandwich ELISA, use this antibody as detection at 0.5µg/ml with ab25014 as capture.</td>
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<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.</td>
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Target

Function
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Images
ab25101 staining Human tonsil. Staining is localised to the cytoplasm and protein is secreted.
Left panel: with primary antibody at 1 ug/ml. Right panel: isotype control.
Sections were stained using an automated system DAKO Autostainer Plus, at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 antigen retrieval buffer EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes.
Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be

Standard curve for Interferon gamma (analyte: ab51240); dilution range 1pg/ml to 1µg/ml using capture antibody ab25014 at 5µg/ml and detector antibody ab25101 at 0.5µg/ml.
Western blot - Anti-interferon gamma antibody
(ab25101)

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