

Anti Human Interferon-gamma (IFN- γ) Azide Free Mouse Monoclonal Antibody

Code: 211-44-529B **Lot no.:**
Isotype: Mouse IgG1 κ **Exp:** 1 year from date of dispatch
Clone: 45-15
Quantity: 500 μ g (1.0 mg/ml) azide free antibody in PBS pH 8.0.
Source: Tissue culture supernatant
Purification: Affinity chromatography.

Specificity: This antibody recognizes both the recombinant and the natural form of human interferon-gamma (IFN- γ)¹. This antibody does not react with human IL-4, IFN- α or acid inactivated IFN- γ . It shows only a minimal reactivity with heat-inactivated IFN- γ (<0.05%)¹.

Applications: Chemiluminescent Immuno Assay (CLIA): Clones 43-11 and 45-15 can be used together as an antibody pair to implement a highly sensitive Chemiluminescent Immuno Assay (CLIA) for human IFN- γ (0.5 pg/ml as the detection limit) and a bead-based CLIA (detection limit of 0.2 pg/ml)¹.

Cytokine Immunotrapping Assay (CITA): Clones 43-11 and 45-15 can be used in combination to study the early production of human IFN- γ in a highly sensitive chemiluminescent based Cytokine Immunotrapping Assay (CITA)³.

Neutralization: This antibody is suitable for neutralization of the biologic activity of human IFN- γ ¹.

Flow cytometry (FACS): Intracellular staining of IFN- γ -producing cells was demonstrated for clone 45-15. Mitogen stimulated purified T cells were treated with saponin and monensin to yield a strong positive signal by flow cytometry². With the use of allergen specific T cell clones derived from patients with atopic dermatitis, a high degree of correlation between ELISA measurement in the supernatants and intracellular FACS analysis was observed with respect to the pattern of cytokine production (Th0, Th1 and Th2).

ELISA A biotinylated version (Cat # 211-44-229A) of clone 45-15 may be used as the detecting antibody in a two-site sandwich ELISA for measuring human IFN- γ levels. The purified form of clone 43-11, (Cat # 211-44-129A) may be used as the capture reagent¹ with recombinant human IFN- γ (Cat # 111-40-129) as the standard. Optimal concentration for the biotinylated detection antibody (clone 45-15) was 1 μ /ml. This ELISA measured human IFN- γ with a detection limit of 37 pg/ml¹. The detection limit may be increased to 15 pg/ml with the use of a bead-ELISA assay¹.

We recommend that each laboratory determine an optimum working titre for use in its particular application.

References:

1. Alkan et al. (1994). "Chemiluminescent and enzymatic-linked immuno assays for sensitive detection of human IFN- γ ". *J. Immunoassays*, 15 (3): 217-238.
2. Jung T. et al. (1995). "Interleukin-4 and interleukin-5 are rarely co-expressed by human T cells". *Eur. J. Immunol.* 25: 2413-2416.
3. Akdis, A.C., et al. (1995). "Cytokine Immunotrapping: an assay to study the kinetics of production and consumption or degradation of human interferon γ ". *J. Immunol. Methods.* 182:251-261.

Storage: Since antibody solution does not contain sodium azide or other preservatives, we recommend to aliquot solution into small volumes under sterile conditions and store at -20°C. Avoid repeated freeze thaw cycles.

For Research Use Only. Not For Diagnostic or Therapeutic Use.

Conditions: The information disclosed herein is not be construed as a recommendation to use the above product in violation of any patents. ImmunoKontakt will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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