

Murine IFN- γ ELISpot Kit

PRODUCT SPECIFICATIONS

Catalogue N°	862.031.001PC - 1 x 96 Discovery (pre-coated plate) 862.031.002PC - 2 x 96 (pre-coated plates) 862.031.005PC - 5 x 96 (pre-coated plates)
Target species	Murine
Specificity	Recognizes natural murine IFN-g
Incubation	3h after cell stimulation
Cross Reaction	No cross reactivity with other murine cytokines
Kit Content	Diaclone Pre-coated ELISpot kits include precoated PVDF plates, Detection antibody, Alkaline phosphatase conjugate, BSA, BCIP/NBT ready-to-use substrate buffer.
Synonym	IFN-g IFN-gamma

Discover Diaclone

With over 30 years experience and extensive expertise, we are committed to providing excellence in Monoclonal Antibody and Immunoassay development.

The expanding range of Diaclone Immunology products is specifically designed to advance research applications.

Our experience and expertise coupled to the diversity and quality of our product range makes Diaclone a clear choice to :

Fast Track Your Research

Diaclone products



REFERENCES

- Musson, J. A. et al., Infect. Immun.,2010; (78): 4356-4362 - [Pubmed link](#) 
- Patil, H.P. et al.,Vaccines (Basel). 2017 Jul 27;5(3). pii: E19. - [Pubmed link](#) 
- Pollard, C. et al., Mol Ther.,2013; 21(1): 251-9 - [Pubmed link](#) 
- Ramakrishna L. et al., J. Virol., 2004; 78(17): 9174 - 9189 - [Pubmed link](#) 
- Someya K. et al., J. Virol., 2004; 78(18): 9842 - 9853 - [Pubmed link](#) 
- Tsunoda, I. et al., J Virol.,2005; 79(23): 14640-6. - [Pubmed link](#) 
- Yan, L. et al., Infect. Immun.,2008; 181.00245-08. - [Pubmed link](#) 
- Joe, P.T. et al., J Transl Med. 2019 Jul 25;17(1):242. - [Pubmed link](#) 
- Van Hoecke L et al., Nat Commun. 2018 Aug 24;9(1):3417 - [Pubmed link](#) 
- Van Hoecke, L. et al., Mol Ther Nucleic Acids. 2020 Dec 4; 22: 373–381. - [Pubmed link](#) 
- Van Hoecke, L. et al., Oncoimmunology. 2020; 9(1): 1802968. - [Pubmed link](#) 
- Huang, J. et al., Vaccine. 2006 Jun 5; 24(23): 4905–4913. - [Pubmed link](#) 
- Hofer, T. et al., Cancers (Basel) 2021 Dec; 13(23): 6107. - [Pubmed link](#) 

BACKGROUND



6 rue Dr Jean-François-Xavier Girod
BP 1985
25020 Besançon cedex
France

Tel : +33 (0)3 81 41 38 38
Fax : +33 (0)3 81 41 36 36

Email : Info@diaclone.com
www.diaclone.com

Different populations of T-cells secrete differing patterns of cytokines that ultimately lead to different immune responses. IFN γ production is a key function of Th1, CD8+ CTLs and also NK cells. IFN γ is a cytokine critical for cell mediated immunity against viral and intracellular bacterial infections and is involved in the inflammatory response following secretion via macrophage activation and stimulation of antibody secretion. IFN γ is the hallmark effector cytokine of Th1 and therefore is an excellent marker for identifying a host response to intracellular pathogens.

IFN γ is produced during infection by T cells of the cytotoxic/suppressor phenotype (CD8) and by a subtype of helper T cells, the Th1 cells. Th1 cells secrete IL-2, IL-3, TNF α and IFN γ , whereas Th2 cells mainly produce IL-3, IL-4, IL-5, and IL-10, but little or no IFN γ . IFN γ preferentially inhibits the proliferation of Th2 but not Th1 cells, indicating that the presence of IFN γ during an immune response will result in the preferential proliferation of Th1 cells.

In addition, IFN γ has several properties related to immunoregulation. IFN γ is a potent activator of mononuclear phagocytes, and activates macrophages to kill tumor cells by releasing reactive oxygen intermediates and TNF α . IFN γ induces or augments the expression of MHC antigens on macrophages, T and B cells and some tumor cell lines. On T and B cells IFN γ promotes differentiation. It enhances proliferation of activated B cells and can act synergistically with IL-2 to increase immunoglobulin light-chain synthesis.

The role of IFN γ as a disease marker has been demonstrated for a number of different pathological situations including, viral infection, Autoimmune disease, transplant rejection, Diabetes and allergy.