

DATA SHEET

Versions: 01

Revision date: 25/11/2023

1. Identification

Product name: ELISA kits for Mouse of Mouse IL-1

Reactions: 96,48 rxns

Cat. No.: PRA-MIL-1-96, PRA-MIL-1-48

2. Description

Interferon-gamma (IFN- γ), an inflammatory cytokine, is primarily synthesized by helper T lymphocytes and natural killer cells. Renowned for its diverse inflammatory properties, IFN- γ plays a pivotal role in combating bacterial, viral, and fungal infections. Conversely, it also assumes a significant role in the development of diseases mediated by cellular immunity. IFN- γ stands out as a key player implicated in diseases governed by cellular immunity. Its influence extends to serving as a critical inflammatory indicator in laboratory studies, offering insights into disease conditions and evaluating the inflammatory or anti-inflammatory effects of pharmaceutical interventions. The current kit, designed and manufactured with precision, utilizes mouse monoclonal anti-IFN- γ antibodies. It's essential to note that this kit is specifically tailored for measuring IFN- γ levels in mice and may not be suitable for similar animal cases. This detailed information provides a comprehensive understanding of IFN- γ , emphasizing its diverse roles in immunity and its significance in both health and disease contexts.



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3. Kit Contents

Component	Cat. no	Quantity
Human anti- MIFN-Ypre-coated plate	PRA- MIFN-YP	96 vials
Standards	PRA- MIFN-Y N1-4	200 µl
HRP-Avidin buffer	PRA-HA	5 mL
HRP	PRA-HAA	540 µl
Substrate	PRA-SU	5 mL
Stopping	PRA-ST	7 mL
10X washing buffer	PRA-WB	40 mL
Detection Ab	PRA- MIFN-YD	5 mL

4. Storage specifications

All components of the ELISA kits can be stored at 4°C temperature.

5. Applications

Detection of both inflammatory and anti-inflammatory factors through ELISA.

6. Assay Procedure

How to Prepare Solutions:

1. Washing Buffer:

- To prepare the washing solution, dilute it with distilled water at a 1:10 ratio.

2. HRP-Avidin:

- Spin the HRP vial using a microfuge device, then add all its contents to the HRP-Avidin buffer vial.



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- For quantities less than 48 assays, mix 416 μ L of HRP-Avidin, 41 μ L of HRP per 8-well row.

Working with the Kit:

1. Plate Preparation:

- Remove the plate from its package and let it reach room temperature in a dry environment.

- Add 50 μ L of standards #4 to #1 in the first to fourth wells.

2. Sample Incubation:

- Add 50 μ l of the desired sample to the remaining wells.

- Incubate for 60 minutes on a 200 RPM shaker at room temperature.

3. Plate Washing:

- After proper incubation, wash the plates three times using the washing solution (after adding the washing solution, incubate the plates for approximately 1 minute at room temperature and then drain).

4. Conjugated Antibody Addition:

- Add 50 μ l of conjugated antibody (Detection ab) to all wells.

- Incubate for 60 minutes on a 200 RPM shaker at room temperature.

5. Plate Washing (Again):

- After proper incubation, wash the plates three times using washing solution.

6. HRP-Avidin Addition:

- Add 50 μ l of HRP-Avidin solution to all wells.

- Incubate for 30 minutes on a shaker (at least at RPM 200).

7. Plate Washing (Again):

- After proper incubation, wash the plates five times using washing solution.



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8. Substrate Addition:

- Add 50 μ l of substrate to all wells and incubate for 15 minutes. Note that 15 minutes is enough for incubation, but if the amount of color produced is low, the time can be increased to 20 minutes.

9. Stopping Reaction:

- Add 25 μ l of the stopping solution to all the wells.

10. Measurement:

- Measure the absorbance of the samples in an ELISA reader at a wavelength of 450 nm.

7. Safety

- The solutions used in the kit have oxidizing and acidic properties.
- Avoid direct contact with skin and eyes.
- In case of contact with the mentioned tissues, wash with plenty of water and go to the nearest medical center.

8. Quality Certifications

9. Further information

- This product is developed, designed, and sold exclusively only for research purposes use.
- The product was not tested for use in diagnostics or for drug development.
- It is not suitable for administration to humans or animals.



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10. Other Kits

Other ELISA kits:

Human:

IL-1 β , IL-2, IL-4, IL-6, IL-8, IL-10, IL-12, IL-13, IL-18, IL-23, IL-29, IL-17A,
TGF- β , VEGF, TNF- α , IFN- γ , CCL2 (MCP-1), CCL3 (MIP-1-alpha), CXCL10
(IP-10), CXCL12 (SDF-1), CCL21

Mouse:

IL-1 β , IL-2, IL-4, IL-6, IL-10, IL-13, IL-33, IL-18, TNF- α , TGF- β , CCL3, IFN- γ ,
Total IgG, Total IgE

Rat:

TNF- α , IL-1 β , IL-6, IL-10, IL-17A

NOTE

All products have been manufactured by Karmania Pars Gene Company in the Iran.

