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| 1. Identification |

Product name: ELISA kits of human IFN-y

Reactions: 96,48 Rxns

Cat. No.: PRA-HIFN-γ-96, PRA-HIFN-γ-48

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| 2. Description |

IFN-γ is an inflammatory cytokine produced mainly by T helper lymphocytes and natural killer cells. This cytokine has many inflammatory properties and its role against bacterial, viral and fungal infections is well defined. On the other hand, this cytokine plays a big role in causing diseases mediated by cellular immunity. Therefore, this cytokine as an inflammatory indicator is widely used in laboratory studies to investigate the condition of a disease or the inflammatory or anti-inflammatory effects of a drug. The current kit is designed and produced using monoclonal antibodies against human IFN-γ, so it is not used in the measurement of similar animal cases.

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| 3. Kit Contents |

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| Component | **Cat. no** | Quantity |
| Human anti- anti-IFN-γ pre-coated plate | PRA- IFN-γ p | 96/48 vials |
| Standards | PRA- IFN-γ SN1-4 | 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- IFN-γ D | 5 ml |

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| 4. Storage specifications |

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

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| 5. Applications |

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

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| 6. Assay Procedure |

**Preparing Solutions:**

1. Washing Buffer:

- Dilute the provided washing solution with distilled water at a 1:10 ratio.

2. HRP-Avidin:

- Spin the HRP vial using a microfuge device, then add the entire content to the HRP-Avidin buffer vial.

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

**Measuring IL8a with the Kit:**

1. Plate Preparation:

- Remove the plate from its packaging and allow it to reach room temperature in a dry environment.

- Add 50 µl of standards 1 to 4 to the first to fourth wells.

2. Sample Incubation:

- Add 50 µl of the desired sample to the remaining wells.

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

3. Plate Washing:

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

4. Conjugated Antibody Addition:

- Add 50 µl of the conjugated antibody (Detection ab) to all wells.

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

5. Plate Washing (Again):

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

6. HRP-Avidin Addition:

- Add 50 µl of the HRP-Avidin solution to all wells.

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

7. Plate Washing (Again):

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

8. Substrate Addition:

- Add 50 µl of substrate to all wells and incubate for 15 minutes. Adjust incubation time if needed (up to 20 minutes).

9. Stopping Reaction:

- Add 25 µl of the stopping solution to all wells.

10. Measurement:

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

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| 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.

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| 8. Quality Certifications |

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

Mouse:

IL-1β, IL-2, IL-4, IL-6, IL-10, IL-13, IL-33, IL-17, TNF-α, TGF-β, CCL3, IFN-γ,

Total IgG, Total IgE

Rat:

TNF-α, IL-1β, IL-6, IL-10, IL-18A

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| NOTE |

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