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Datasheet for ABIN4986917

IFNA ELISA Kit

1 Image

Overview

Quantity:	96 tests
Target:	IFNA
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	15.625-1000 pg/mL
Minimum Detection Limit:	15.625 pg/mL
Application:	ELISA

Product Details

Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (citrate), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Natural and recombinant Human IFN- α Ligand
Sensitivity:	7 pg/mL
Material not included:	<ul style="list-style-type: none">• Microplate reader.• Pipettes and pipette tips.• EP tube Deionized or distilled water.

Target Details

Target:	IFNA
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Target Details

Alternative Name: IFN-alpha ([IFNA Products](#))

Background: IFN- α/β R2, also known as IFNAR2, is a 100 kDa glycoprotein in the class II cytokine receptor family. These proteins form heterodimeric receptor complexes that transduce signals from the interferon, IL 10, and IL28 families of cytokines (1, 2). IFN- α/β R2, in association with IFN- α/β R1, is required for mediating the antiviral, antiproliferative, and apoptotic effects of the type I interferons IFN- α and IFN- β . IFN- α/β R2 is the principal ligand binding subunit of the receptor. Ligand binding is stabilized by the subsequent association with IFN- α/β R1, resulting in the formation of a signaling ternary receptor complex (3, 4). Mature human IFN- α/β R2 consists of a 217 amino acid (aa) extracellular domain (ECD) with two fibronectin type III repeats, a 21 aa transmembrane segment, and a 251 aa cytoplasmic domain. Alternate splicing generates a secreted isoform that corresponds to the ECD and a 50 kDa transmembrane isoform with a substituted and truncated cytoplasmic region (5, 6). The short isoform is impaired in its ability to activate signaling molecules and functions as a dominant negative receptor subunit (7-9). IFN- α/β R2 is also subject to presenilin dependent intramembrane proteolysis, resulting in the liberation of nearly the entire ECD as well as the cytoplasmic domain which migrates to the nucleus and can inhibit gene transcription (10). High concentrations of soluble IFN- α/β R2 bind and neutralize IFN- α and IFN- β , while lower concentrations prolong the antiviral activity of circulating IFN- β but not IFN- α (11). Human but not mouse IFN- α/β R2 constitutively associates with STAT4, which may account for species specific differences observed in type I interferon responses (12). Within the ECD, human IFN- α/β R2 shares 63 %, 60 %, and 48 % aa sequence identity with bovine, mouse, and ovine IFN- α/β R2, respectively.

Pathways: [JAK-STAT Signaling](#), [TLR Signaling](#), [Hepatitis C](#), [Inflammasome](#)

Application Details

Application Notes: Detection Wavelength: 450 nm

Sample Volume: 20 μ L

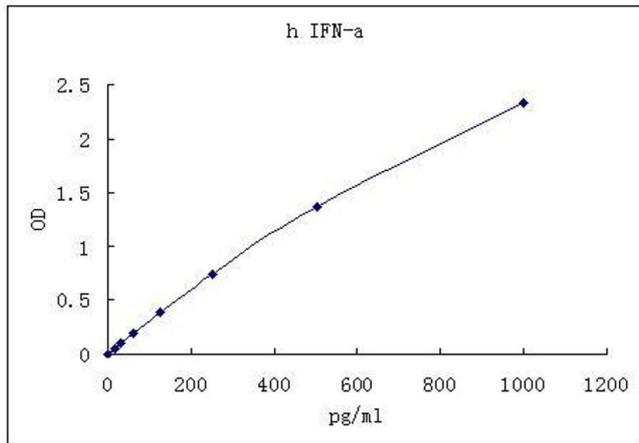
Assay Time: 3 h

Plate: Pre-coated

Restrictions: For Research Use only

Handling

Storage: 4 °C



ELISA

Image 1.