

## Phospho-Ser535,539 Interferon-α Receptor, Type I, Subunit I Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1064

### **Specification**

# Phospho-Ser535,539 Interferon- $\alpha$ Receptor, Type I, Subunit I Antibody - Product Information

Application WB
Primary Accession P17181
Reactivity Rat

Predicted Bovine, Human, Mouse, Monkey

Host Rabbit
Clonality polyclonal
Calculated MW 110-130 KDa

# Phospho-Ser535,539 Interferon- $\alpha$ Receptor, Type I, Subunit I Antibody - Additional Information

Gene ID 3454
Gene Name IFNAR1

**Other Names** 

Interferon alpha/beta receptor 1, IFN-R-1, IFN-alpha/beta receptor 1, Cytokine receptor class-II member 1, Cytokine receptor family 2 member 1, CRF2-1, Type I interferon receptor 1, IFNAR1, IFNAR

#### Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser535/539 conjugated to KLH.

#### **Dilution**

WB~~ 1:1000

#### **Format**

Prepared from rabbit serum by affinity purification via sequential chromatography on phosphoand dephosphopeptide affinity columns.

## **Antibody Specificity**

Specific for IFNAR1 protein phosphorylated at Ser535,539. Note: themolecular weight of the IFNAR1 varies with cell line (different levels of glycosylation) in 293 and HeLa Cells; the mature form is  $\sim 110 - 130$ k.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Phospho-Ser535,539 Interferon- $\alpha$  Receptor, Type I, Subunit I Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Shipping**



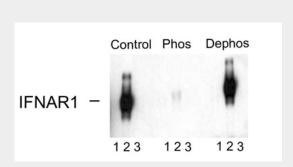
Blue Ice

## Phospho-Ser535,539 Interferon-α Receptor, Type I, Subunit I Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Phospho-Ser535,539 Interferon-α Receptor, Type I, Subunit I Antibody - Images



Western blot of immunoprecipitates from HEK 293 cells transfected with 1. Mock, 2. IFNAR1 WT, and 3. IFNAR1 S535A and S539A mutants showing specific immunolabeling of the  $\sim$ 110k to  $\sim$ 130k IFNAR1 WT. The immunolabeling is absent in IFNAR1 Ser535 and Ser539 mutants (Control). The immunolabeling is blocked by the phosphopeptide (Phos) used as the antigen but not by the corresponding dephosphopeptide (Dephos).

## Phospho-Ser535,539 Interferon-α Receptor, Type I, Subunit I Antibody - Background

Interferons are widely used therapeutic agents because of their anti tumor and antiviral effects and because of their modulatory effects on the immune system (Biron, 2001; Kirkwood, 2002). These cytokines produce their effects by binding to the Type 1 Interferon- $\alpha$  Receptor (IFNAR1). Down regulation of this receptor plays a key role in determining the magnitude and duration of cytokine signaling. This down regulation is thought to be influenced by phosphorylation of Serine 535 and 539 in the IFNAR1 (Kumar et al., 2003).

## Phospho-Ser535,539 Interferon-α Receptor, Type I, Subunit I Antibody - References

Biron CA (2001) Interferons alpha and beta as immune regulators--a new look. Immunity 14:661-664.

Kirkwood J (2002) Cancer immunotherapy: the interferon-alpha experience. Semin Oncol 29:18-26. Kumar KG, Tang W, Ravindranath AK, Clark WA, Croze E, Fuchs SY (2003) SCF(HOS) ubiquitin ligase mediates the

ligand-induced down-regulation of the interferon-alpha receptor. EMBO J 22:5480-5490. K. G. Suresh Kumar, John J. Krolewski, and Serge Y. Fuchs (2004) Phosphorylation and Specific Ubiquitin Acceptor

Sites Are Required for Ubiquitination and Degradation of the IFNAR1 Subunit of Type I Interferon Receptor. J.

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