

## Phospho-IL1R(Y496) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3131a

## **Specification**

# Phospho-IL1R(Y496) Antibody - Product Information

**Application** WB, IHC-P,E **Primary Accession** P14778 Other Accession Q02955 Reactivity Human Predicted Rat Host Rabbit **Polyclonal** Clonality Isotype Rabbit IgG

# Phospho-IL1R(Y496) Antibody - Additional Information

#### **Gene ID 3554**

#### **Other Names**

Interleukin-1 receptor type 1, IL-1R-1, IL-1RT-1, IL-1RT1, CD121 antigen-like family member A, Interleukin-1 receptor alpha, IL-1R-alpha, Interleukin-1 receptor type I, p80, CD121a, Interleukin-1 receptor type 1, membrane form, mIL-1R1, mIL-1RI, Interleukin-1 receptor type 1, soluble form, sIL-1R1, sIL-1RI, IL1R1, IL1RA, IL1RT1

## Target/Specificity

This IL1R Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y496 of human IL1R.

#### **Dilution**

WB~~1:1000 IHC-P~~1:50~100

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

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

#### **Precautions**

Phospho-IL1R(Y496) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Phospho-IL1R(Y496) Antibody - Protein Information

## Name IL1R1



# Synonyms IL1R, IL1RA, IL1RT1

**Function** Receptor for IL1A, IL1B and IL1RN (PubMed: 2950091, PubMed: 37315560). After binding to interleukin-1 associates with the coreceptor IL1RAP to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B, MAPK and other pathways. Signaling involves the recruitment of adapter molecules such as TOLLIP, MYD88, and IRAK1 or IRAK2 via the respective TIR domains of the receptor/coreceptor subunits. Binds ligands with comparable affinity and binding of antagonist IL1RN prevents association with IL1RAP to form a signaling complex. Involved in IL1B-mediated costimulation of IFNG production from T-helper 1 (Th1) cells (PubMed: 10653850).

#### **Cellular Location**

Membrane; Single- pass type I membrane protein. Cell membrane. Secreted

#### **Tissue Location**

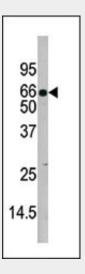
Expressed in T-helper cell subsets. Preferentially expressed in T-helper 1 (Th1) cells.

## Phospho-IL1R(Y496) Antibody - Protocols

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

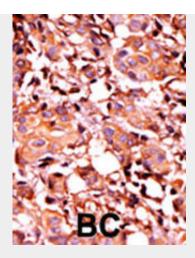
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Phospho-IL1R(Y496) Antibody - Images



The anti-Phospho-IL1R-Y496 Pab (Cat. #AP3131a) is used in Western blot to detect Phospho-IL1R-Y496 in mouse liver tissue lysate





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

# Phospho-IL1R(Y496) Antibody - Background

IL1R is a member of the interleukin 1 receptor family. An experiment with transient gene expression demonstrated that this receptor was incapable of binding to interleukin 1 alpha and interleukin 1 beta with high affinity. IL1R is a receptor for interleukin 1 family member 9 (IL1F9). Binding to the agonist leads to the activation of NF-kappa-B. The gene for this protein and four other interleukin 1 receptor family genes, including interleukin 1 receptor, type I (IL1R1), interleukin 1 receptor, type II (IL1R2), interleukin 1 receptor-like 1 (IL1RL1), and interleukin 18 receptor 1 (IL18R1), form a cytokine receptor gene cluster in a region mapped to chromosome 2q12.

## Phospho-IL1R(Y496) Antibody - References

Debets, R., et al., J. Immunol. 167(3):1440-1446 (2001). Dale, M., et al., Genomics 57(1):177-179 (1999). Torigoe, K., et al., J. Biol. Chem. 272(41):25737-25742 (1997). Lovenberg, T.W., et al., J. Neuroimmunol. 70(2):113-122 (1996).