

Phospho-IL1R(Y496) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3131a**Specification**

Phospho-IL1R(Y496) Antibody Blocking peptide - Product InformationPrimary Accession [P14778](#)**Phospho-IL1R(Y496) Antibody Blocking peptide - 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, IL1R, IL1RA, IL1RT1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP3131a](/product/products/AP3131a) was selected from the region of human Phospho-IL1R-Y496. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-IL1R(Y496) Antibody Blocking peptide - Protein Information**Name** IL1R1**Synonyms** IL1R, IL1RA, IL1RT1**Function**

Receptor for IL1A, IL1B and IL1RN (PubMed: [2950091](http://www.uniprot.org/citations/2950091), PubMed: [37315560](http://www.uniprot.org/citations/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 Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-IL1R(Y496) Antibody Blocking peptide - Images**Phospho-IL1R(Y496) Antibody Blocking peptide - 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 Blocking peptide - 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).