

**IL1A-S87 Antibody Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP6860a****Specification**

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**IL1A-S87 Antibody Blocking peptide - Product Information**Primary Accession [P01583](#)**IL1A-S87 Antibody Blocking peptide - Additional Information****Gene ID** 3552**Other Names**

Interleukin-1 alpha, IL-1 alpha, Hematopoietin-1, IL1A, IL1F1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP6860a](/products/AP6860a) was selected from the region of human IL1A-pS87.ctrl. 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.

**IL1A-S87 Antibody Blocking peptide - Protein Information****Name** IL1A**Synonyms** IL1F1**Function**

Cytokine constitutively present intracellularly in nearly all resting non-hematopoietic cells that plays an important role in inflammation and bridges the innate and adaptive immune systems (PubMed: [26439902](http://www.uniprot.org/citations/26439902)). After binding to its receptor IL1R1 together with its accessory protein IL1RAP, forms the high affinity interleukin-1 receptor complex (PubMed: [2950091](http://www.uniprot.org/citations/2950091), PubMed: [17507369](http://www.uniprot.org/citations/17507369)). Signaling involves the recruitment of adapter molecules such as MYD88, IRAK1 or IRAK4 (PubMed: [17507369](http://www.uniprot.org/citations/17507369)). In turn, mediates the activation of NF-kappa-B and the three MAPK pathways p38, p42/p44 and JNK

pathways (PubMed:<a href="http://www.uniprot.org/citations/14687581" target="\_blank">14687581</a>). Within the cell, acts as an alarmin and cell death results in its liberation in the extracellular space after disruption of the cell membrane to induce inflammation and alert the host to injury or damage (PubMed:<a href="http://www.uniprot.org/citations/15679580" target="\_blank">15679580</a>). In addition to its role as a danger signal, which occurs when the cytokine is passively released by cell necrosis, directly senses DNA damage and acts as a signal for genotoxic stress without loss of cell integrity (PubMed:<a href="http://www.uniprot.org/citations/26439902" target="\_blank">26439902</a>).

#### **Cellular Location**

Nucleus. Cytoplasm. Secreted Note=The lack of a specific hydrophobic segment in the precursor sequence suggests that IL-1 is released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and secretion (PubMed:32272059) Recruited to DNA damage sites and secreted after genotoxic stress

#### **IL1A-S87 Antibody Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **IL1A-S87 Antibody Blocking peptide - Images**

#### **IL1A-S87 Antibody Blocking peptide - Background**

IL1A is a member of the interleukin 1 cytokine family. This cytokine is a pleiotropic cytokine involved in various immune responses, inflammatory processes, and hematopoiesis. This cytokine is produced by monocytes and macrophages as a proprotein, which is proteolytically processed and released in response to cell injury, and thus induces apoptosis.

#### **IL1A-S87 Antibody Blocking peptide - References**

Cousin,E.,et.al., Neurobiol. Aging (2009)