

# Anti-IL-1a Reference Antibody (bermekimab)

Recombinant Antibody  
Catalog # APR10523

## Product Information

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Application	FC, Kinetics, Animal Model
Primary Accession	<a href="#">P01583</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	30607

## Additional Information

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Target/Specificity	IL-1a
Endotoxin Conjugation	Unconjugated
Expression system	CHO Cell
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## Protein Information

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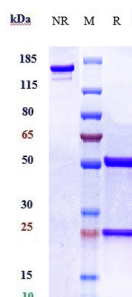
Name	IL1A
Synonyms	IL1F1
Function	<p>Cytokine constitutively present intracellularly in nearly all resting non-hematopoietic cells that plays an important role in inflammation and bridges the innate and adaptive immune systems (PubMed:<a href="#">26439902</a>). After binding to its receptor IL1R1 together with its accessory protein IL1RAP, forms the high affinity interleukin-1 receptor complex (PubMed:<a href="#">17507369</a>, PubMed:<a href="#">2950091</a>). Signaling involves the recruitment of adapter molecules such as MYD88, IRAK1 or IRAK4 (PubMed:<a href="#">17507369</a>). In turn, mediates the activation of NF-kappa-B and the three MAPK pathways p38, p42/p44 and JNK pathways (PubMed:<a href="#">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="#">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="#">26439902</a>).</p>

Nucleus. Cytoplasm. Secreted Note=The lack of a specific hydrophobic

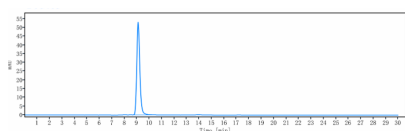
## Cellular Location

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.

## Images



Anti-IL-1a Reference Antibody (bermekimab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.



The purity of Anti-IL-1a Reference Antibody (bermekimab) is more than 95%, determined by SEC-HPLC.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.