# abcam

#### Product datasheet

## Anti-IL-1 alpha antibody ab9614

#### Overview

Product name Anti-IL-1 alpha antibody

**Description** Rabbit polyclonal to IL-1 alpha

Host species Rabbit

Tested applications Suitable for: ICC/IF, Sandwich ELISA, WB, Neutralising, IHC-P, ELISA

Species reactivity Reacts with: Human

Immunogen Recombinant full length protein corresponding to Human IL-1 alpha. Highly pure (>98%)

recombinant hlL-1a (human Interleukin-1-alpha).

Database link: P01583

Positive control IHC-P: Human liver tissue; Recombinant human IL-1 alpha protein (ab9615) can be used as a

positive control in WB.

General notes This product is no longer batch tested in IHC, for an IHC validated antibody please see ab7632

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Lyophilized:Reconstitute with 200µl of sterile water. The reconstituted antibody is stable for at

least 2 weeks at 2-8C and at least 6 months at -20C

**Storage instructions** Shipped at 4°C. Store at -20°C.

**Storage buffer** No preservative, sterile filtered

Purity Immunogen affinity purified

Clonality Polyclonal Isotype unknown
Light chain type unknown

### **Applications**

The Abpromise guarantee

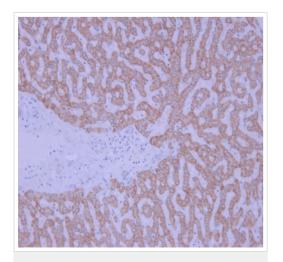
Our <u>Abpromise guarantee</u> covers the use of ab9614 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application    | Abreviews              | Notes   |
|----------------|------------------------|---|
| ICC/IF         | **** <u>(1)</u>        | Use at an assay dependent concentration.  |
| Sandwich ELISA |                        | Use at an assay dependent concentration.  To detect IL-1 αlpha by sandwich ELISA (using 100 μl/well antibody solution) a concentration of 0.5 - 2.0 μg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with <u>ab271226</u> as a detection antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant IL-1 αlpha. |
| WB             | <b>★★★★</b> <u>(1)</u> | Use at an assay dependent concentration. To detect hlL-1a by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant hlL-1a is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.   |
| Neutralising   |                        | Use at an assay dependent concentration.  To yield one-half maximal inhibition [ND50] of the biological activity of hlL-1a (20 ng/ml), a concentration of 1.0 - 2.0 µg/ml of this antibody is required.   |
| IHC-P          |                        | Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.   |
| ELISA          |                        | Use at an assay dependent concentration.  To detect hlL-1a by direct ELISA (using 100 µl/well antibody solution) a concentration of at least 0.5 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of 0.2 - 0.4 ng/well of recombinant hlL-1a.                           |

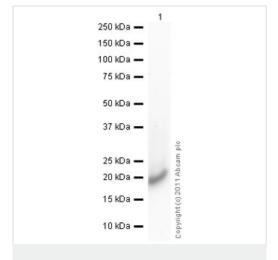
| Target |  |
|--------|--|
|--------|--|

| Function              | Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells. |
|-----------------------|--|
| Sequence similarities | Belongs to the IL-1 family.  |
| Domain                | The similarity among the IL-1 precursors suggests that the amino ends of these proteins serve some as yet undefined function.  |
| Cellular localization | Secreted. 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.  |

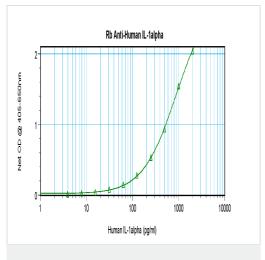


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IL-1 alpha antibody (ab9614)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling IL-1 alpha with ab9614 at 1  $\mu$ g/mL (45 minute incubation at room temperature). Heat mediated antigen retrieval was performed using a buffer at pH 6. An HRP-labeled polymer detection system was used with a DAB chromogen.



Western blot - Anti-IL-1 alpha antibody (ab9614)



Sandwich ELISA - Anti-IL-1 alpha antibody (ab9614)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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