

## Datasheet: AAR15B

<b>Description:</b>	RABBIT ANTI RAT INTERLEUKIN-1 BETA:Biotin
<b>Specificity:</b>	IL-1 BETA
<b>Format:</b>	Biotin
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	50 µg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin	▪			
ELISA	▪			0.25 - 1.0ug/ml
Western Blotting	▪			0.1 - 0.2ug/ml

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using the appropriate negative/positive controls.

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG conjugated to Biotin - lyophilised
<b>Reconstitution</b>	<p>Reconstitute with 0.5ml sterile PBS containing 0.1% bovine serum albumin</p> <p>Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. For long term storage the addition of 0.09% sodium azide is recommended.</p> <p>N.B. For functional studies do not add sodium azide</p>
<b>Antiserum Preparation</b>	Antisera to rat IL-1 beta were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None Present
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml after reconstitution
<b>Immunogen</b>	Recombinant rat IL-1 beta ( <a href="#">PRP23</a> ).

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**External Database****Links****UniProt:**

[Q63264](#)    [Related reagents](#)

**Entrez Gene:**

[24494](#)    Il1b    [Related reagents](#)

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**Specificity**

**Rabbit anti Rat Interleukin-1 beta antibody** recognizes rat IL-1 beta. Interleukin-1 $\beta$  is a 152 amino acid active pro-inflammatory cytokine produced with an additional 116 amino acid pro-peptide region. IL-1 $\beta$  has a broad mode of action, stimulating prostaglandin synthesis, neutrophil, T cell and B cell activation and collagen synthesis.

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**ELISA**

This product may be used in a direct ELISA or as a detection reagent in a sandwich ELISA together with [AAR15G](#) as the capture reagent and [PRP23](#) as the standard.

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**References**

1. Girard, S. (2008) Pro-inflammatory disequilibrium of the IL-1 beta/IL-1ra ratio in an experimental model of perinatal brain damages induced by lipopolysaccharide and hypoxia-ischemia. [Cytokine. 43: 54-62.](#)
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  3. Mahmood, J. *et al.* (2011) Mitigation of radiation-induced lung injury by genistein and EUK-207. [Int J Radiat Biol. 87: 889-901.](#)
  4. Weksler-Zangen, S. *et al.* (2008) Impaired glucose-stimulated insulin secretion is coupled with exocrine pancreatic lesions in the Cohen diabetic rat. [Diabetes. 57: 279-87.](#)
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  7. Savard, A. *et al.* (2013) Involvement of neuronal IL-1 $\beta$  in acquired brain lesions in a rat model of neonatal encephalopathy. [J Neuroinflammation. 10: 110.](#)
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  9. Bergeron, J. *et al.* (2016) Activation of the IL-1 $\beta$ /CXCL1/MMP-10 axis in chorioamnionitis induced by inactivated Group B *Streptococcus*. [Placenta. 47: 116-23.](#)
  10. Alizadeh A *et al.* (2017) Neuregulin-1 positively modulates glial response and improves neurological recovery following traumatic spinal cord injury. [Glia. Apr 29. \[Epub ahead of print\]](#)
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  12. Miyai, H. *et al.* (2017) Topical application of ointment containing 0.5% green tea catechins suppresses tongue oxidative stress in 5-fluorouracil administered rats. [Arch Oral Biol. 82: 247-55.](#)
  13. Kataria, H. *et al.* (2017) Neuregulin-1 promotes remyelination and fosters a pro-regenerative inflammatory response in focal demyelinating lesions of the spinal cord. [Glia. Nov 17 \[Epub ahead of print\].](#)
  14. Dyck, S. *et al.* (2018) Perturbing chondroitin sulfate proteoglycan signaling through LAR and PTP $\sigma$  receptors promotes a beneficial inflammatory response following spinal cord injury. [J Neuroinflammation. 15 \(1\): 90.](#)
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**Storage**

Prior to reconstitution store at +4°C. Following reconstitution store at -20°C.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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<b>Shelf Life</b>	12 months from date of reconstitution.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10162 available at: 10162: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf</a>
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<b>Regulatory</b>	For research purposes only
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