

## 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 - lyophilized
<b>Reconstitution</b>	Reconstitute with 0.5ml sterile PBS containing 0.1% bovine serum albumin 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. N.B. For functional studies do not add sodium azide
<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</b>	None Present

## Stabilisers

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 0.1 mg/ml after reconstitution

Immunogen Recombinant rat IL-1 beta ([PRP23](#)).

## External Database Links

### UniProt:

[Q63264](#)

[Related reagents](#)

### Entrez Gene:

[24494](#)

Il1b

[Related reagents](#)

RRID AB\_2233647

**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.

**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.

## References

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7. Cho, G.S. *et al.* (2013) N-Methyl-D-aspartate receptor antagonists memantine and MK-801 attenuate the cerebral infarct accelerated by *intracorpous callosum* injection of lipopolysaccharides. [Neurosci Lett. 538: 9-14.](#)
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10. Bergeron, J. *et al.* (2016) Activation of the IL-1 $\beta$ /CXCL1/MMP-10 axis in

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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.* (2018) Neuregulin-1 promotes remyelination and fosters a pro-regenerative inflammatory response in focal demyelinating lesions of the spinal cord. [Glia. 66 \(3\): 538-61.](#)
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.](#)
15. Barreto, R.B. *et al.* (2022) Application of Formononetin for the Treatment of Knee Osteoarthritis Induced by Medial Meniscectomy in a Rodent Model [Applied Sciences. 12 \(17\): 8591.](#)
16. Hart, C.G. *et al.* (2020) Acute upregulation of bone morphogenetic protein-4 regulates endogenous cell response and promotes cell death in spinal cord injury. [Exp Neurol. 325: 113163.](#)
17. Roy, P. *et al.* (2024) Protective effects of the R-(+)-thioctic acid treatment: possible anti-inflammatory activity on heart of hypertensive rats. [BMC Complement Med Ther. 24 \(1\): 281.](#)

#### Storage

This product is shipped at ambient temperature.  
Prior to reconstitution store at -20°C.  
After 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.

#### Guarantee

12 months from date of despatch

#### Health And Safety Information

Material Safety Datasheet documentation #10294 available at:  
<https://www.bio-rad-antibodies.com/SDS/AAR15B>  
10294

#### Regulatory

For research purposes only

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