Datasheet: AAR15B

BATCH NUMBER 160401

Description:	RABBIT ANTI RAT INTERLEUKIN-1 BETA:Biotin
Specificity:	IL-1 BETA
Format:	Biotin
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	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.

	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.

Target Species

Rat

Product Form

Purified IgG conjugated to Biotin - lyophilised

Reconstitution

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

Antiserum Preparation

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.

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	None Present
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-1β 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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2. Glatz, T. *et al.* (2010) Peroxisome-proliferator-activated receptors gamma and peroxisome-proliferator-activated receptors beta/delta and the regulation of interleukin 1 receptor antagonist expression by pioglitazone in ischaemic brain. J Hypertens. 28: 1488-97.
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-1β in acquired brain lesions in a rat model of neonatal encephalopathy. J Neuroinflammation. 10: 110.
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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 PTPσ receptors promotes a beneficial inflammatory response following spinal cord injury. J Neuroinflammation. 15 (1): 90.

Storage	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 #10162 available at: https://www.bio-rad-antibodies.com/SDS/AAR15B 10162
Regulatory	For research purposes only

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