

# Anti-Retinoic Acid Receptor, $\beta$ -Isotype Antibody



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Antibodies that work™

**Catalog #:** 1340-RXRB  
**Isotype:** IgG<sub>1</sub>

**Size:** 100  $\mu$ l  
**Clone:** 336

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**Cite this Antibody:** PhosphoSolutions Cat# 1340-RXRB, RRID:AB\_2492229

Host	Applications	Species Tested	Species Assumed*	Molecular Reference
Mouse	WB 1:1000	H, R	C, GP, M, NHP	~48 kDa

**Product Description:** Protein G purified mouse monoclonal antibody.

**Biological Significance:** Retinoic acid (RA; active metabolite of vitamin A) plays a prominent role in regulating the transition of proliferating precursor cells (such as carcinoma cells and neuronal precursors) to postmitotic differentiated cells (Joshi et al., 2005). The Retinoid X Receptors (RXRs) family (RXR $\alpha$ ,  $\beta$  and  $\gamma$ ) preferentially bind 9-*cis*-RA and regulate gene transcription by forming heterodimers with a second family of RA receptors. RAs have been suggested to potentially play a therapeutic role in cervical cancer (Abu et al., 2005). RAs are known to play key roles in neuronal development and an increasing body of evidence indicates that retinoid signaling may regulate synaptic plasticity and associated learning and memory behaviors (Lane and Bailey, 2005).

**Antigen:** Peptide corresponding to amino acids from N-terminal region of human retinoic acid receptor,  $\beta$ -isotype. The antigen is identical in both  $\beta$ 1 and  $\beta$ 2 isoforms.

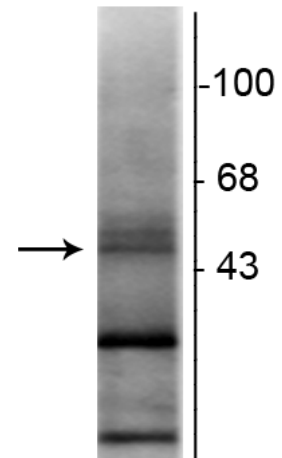
**Antibody Specificity:** Specific for endogenous levels of the ~48 kDa RAR- $\beta$  isotype.

**Purification Method:** Prepared from mouse ascites by ammonium sulfate precipitation followed by affinity purification on a Protein G column.

**Quality Control Tests:** Western blots performed on each lot.

**Packaging:** 100  $\mu$ l in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100  $\mu$ g BSA per ml and 50% glycerol.

**Storage and Stability:** Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~48 kDa RAR- $\beta$  isotype.

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**Application Key:** WB = Western Blot IF = Immunofluorescence IHC = Immunohistochemistry IP = Immunoprecipitation

**Species Reactivity Key:** All-All Species A-Avian Amp-Amphibian Ar-Arabidopsis B-Bovine C-Canine Ch-Chicken D-Drosophila GP-Guinea Pig H-Human Ha-Hamster M-Mouse NHP- Non-human primate P-Pig R-Rat S-Sheep X-Xenopus Z-Zebrafish

\*Species assumed based on 100% homology with sequence used as antigen

**For Research Use Only**

## General References:

Abu J, Batuwangala M, Herbert K, Symonds P (2005) Retinoic acid and retinoid receptors: potential chemopreventive and therapeutic role in cervical cancer. *Lancet Oncol* 6:712-720.

Joshi S, Guleria R, Pan J, Dipette D, Singh US (2005) Retinoic acid receptors and tissue-*trans*-glutaminase mediate short-term effect of retinoic acid on migration and invasion of neuroblastoma SH-SY5Y cells. *Oncogene advance online publication* 12 September 2005; doi: 10.1038/sj.onc.1209027.

Lane MA, Bailey SJ (2005) Role of retinoid signalling in the adult brain. *Prog Neurobiol* 75:275-293.