

## **Retinoic Acid Receptor**, α-Isotype Antibody

Affinity purified mouse monoclonal antibody Catalog # AN1098

#### Specification

# Retinoic Acid Receptor, α-Isotype Antibody - Product Information

| Application       | WB                 |
|-------------------|--------------------|
| Primary Accession | <u>P10276</u>      |
| Reactivity        | Human, Rat         |
| Predicted         | Bovine, Mouse, Pig |
| Host              | Mouse              |
| Clonality         | monoclonal         |
| Isotype           | lgG1               |
| Calculated MW     | 48 KDa             |
|                   |                    |

### Retinoic Acid Receptor, α-Isotype Antibody - Additional Information

| Gene ID   | 5914 |
|---|------|
| Gene Name   | RARA |
| Other Names   |      |
| Retinoic acid receptor alpha, RAR-alpha, Nuclear receptor subfamily 1 group B member 1, RARA, |      |
| NR1B1   |      |

Target/Specificity

Synthetic peptide corresponding to amino acid residues from the N-terminal region conjugated to KLH.

Dilution WB~~ 1:1000

Format

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

**Antibody Specificity** Specific for the ~48k RAR-α isotype.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

Retinoic Acid Receptor,  $\alpha$ -Isotype Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

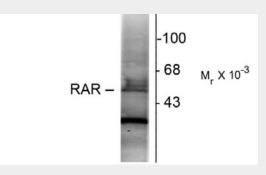


# **Retinoic Acid Receptor**, α-Isotype Antibody - **Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**Retinoic Acid Receptor**, α-Isotype Antibody - Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the  ${\sim}48k$  RAR- $\alpha$  protein.

### **Retinoic Acid Receptor, α-Isotype Antibody - Background**

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).

### **Retinoic Acid Receptor**, α-Isotype Antibody - 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.