

Mouse anti-Human, rat Retinoic Acid Receptor, α-Isotype Monoclonal Antibody | anti-RARA antibody

Anti-Retinoic Acid Receptor, alpha-Isotype

CATALOG # AAA72749	HOST Mouse	REACTIVITY Human, rat	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

Retinoic Acid Receptor; α-Isotype; Monoclonal Antibody; Anti-Retinoic Acid Receptor; alpha-Isotype; anti-RARA antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, rat
Clonality	Monoclonal
Isotype	IgG1
Clone Number	763
Specificity	Immunolabels a ~48kD band in Western Blots of rat brain hippocampal homogenate at antibody dilution of 1:1000.
Purity/Purification	Protein G purified (Prepared from mouse ascites by ammonium sulfate precipitation followed affinity purification on a Protein G column.)
Form/Format	100 ul in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots.
Sequence Length	462
Applicable Applications for anti-RARA antibody	WB (Western Blot)
Antigen	Peptide corresponding to amino acid residues from the N-terminal region of human retinoic acid receptor, alpha-isotype.
Immunogen Information	Synthetic peptide corresponding to amino acid residues from the N-terminal region conjugated to KLH
Immunogen Species	Human
Reactivity Assumed Based on 100% Sequence Homology	Bovine, canine, guinea pig and mouse
Species Reactivity Note	The antibody has been directly tested for reactivity in Western blots in rat and human tissues. It is anticipated that the antibody will also work with bovine, canine, mouse and guinea pig tissues based on the fact that these species have 100% homology with the amino acid sequence used as antigen.
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 (RXRalpha, 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).
Preparation and Storage	Store at -20 degree C; stable for at least 1 year.

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-RARA antibody	Affinity purified mouse monoclonal 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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506419
NCBI GeneID	5914
NCBI Accession #	NP_000955.1
NCBI GenBank Nucleotide #	NM_000964.3
UniProt Accession #	P10276; P78456; Q13440; Q13441; Q96S41; Q9NQS0; B8Y636
Molecular Weight	48
NCBI Official Full Name	retinoic acid receptor alpha isoform 1
NCBI Official Synonym Full Names	retinoic acid receptor, alpha
NCBI Official Symbol	RARA
NCBI Official Synonym Symbols	RAR; NR1B1
NCBI Protein Information	retinoic acid receptor alpha; RAR-alpha; retinoic acid receptor, alpha polypeptide; nuclear receptor subfamily 1 group B member 1; retinoic acid nuclear receptor alpha variant 1; retinoic acid nuclear receptor alpha variant 2; nucleophosmin-retinoic acid receptor alpha fusion protein NPM-RAR long form
UniProt Protein Name	Retinoic acid receptor alpha
UniProt Gene Name	RARA
UniProt Synonym Gene Names	NR1B1; RAR-alpha
UniProt Entry Name	RARA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.