



# RAR $\alpha$ (phospho Ser77) Polyclonal Antibody

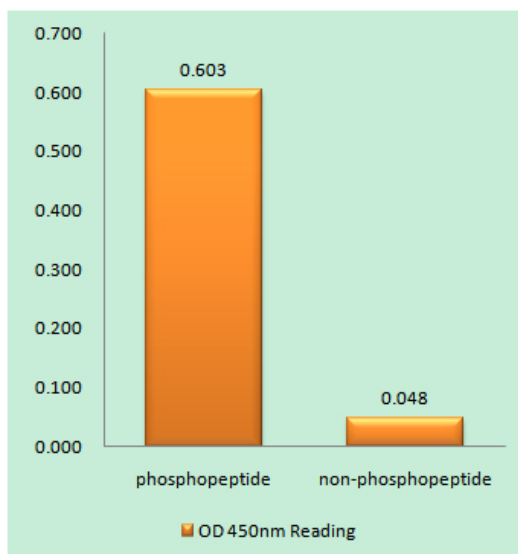
|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-03294                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Gene Name</b>                   | RARA                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human Retinoic Acid Receptor alpha around the phosphorylation site of Ser77. AA range:46-95                                                                                                                                                                                                                                                                                           |
| <b>Specificity</b>                 | Phospho-RAR $\alpha$ (S77) Polyclonal Antibody detects endogenous levels of RAR $\alpha$ protein only when phosphorylated at S77.                                                                                                                                                                                                                                                                                                                         |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                     |
| <b>Dilution</b>                    | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Synonyms</b>                    | NR1B1;Nuclear mitotic apparatus protein retinoic acid receptor alpha fusion protein;Nuclear receptor subfamily 1 group B member 1;Nucleophosmin retinoic acid receptor alpha fusion protein NPM RAR long form;RAR alpha;RAR;RAR-alpha;rara;RARA_HUMAN;RARalpha;RARalpha1;Retinoic acid nuclear receptor alpha variant 1;Retinoic acid nuclear receptor alpha variant 2;Retinoic acid receptor alpha;Retinoic acid receptor alpha polypeptide;RAR $\alpha$ |
| <b>Observed Band</b>               | 45kD                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Calculated Molecular Weight</b> | 45kD                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Cell Pathway</b>                | Nucleus . Cytoplasm . Nuclear localization depends on ligand binding, phosphorylation and sumoylation (PubMed:19850744). Translocation to the nucleus in the absence of ligand is dependent on activation of PKC and the downstream MAPK phosphorylation (By similarity). Increased nuclear localization upon pulsatile shear stress (PubMed:28167758). .                                                                                                 |
| <b>Tissue Specificity</b>          | Expressed in monocytes.                                                                                                                                                                                                                                                                                                                                                                                                                                   |



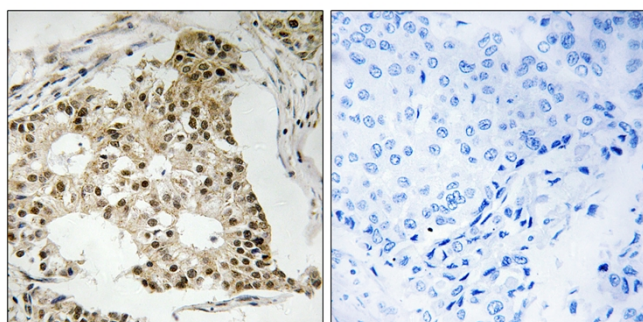
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|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Function</b>                  | <p>disease:Chromosomal aberrations involving RARA may be a cause of acute promyelocytic leukemia (APL) [MIM:612376]. Translocation t(11;17)(q32;q21) with ZBTB16/PLZF; translocation t(15;17)(q21;q21) with PML; translocation t(5;17)(q32;q11) with NPM.,domain:Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain.,function:This is a receptor for retinoic acid. This metabolite has profound effects on vertebrate development. Retinoic acid is a morphogen and is a powerful teratogen. This receptor controls cell function by directly regulating gene expression.,online information:Retinoic acid receptor entry, PTM:Phosphorylated. Phosphorylation does not change during cell cycle. Phosphorylation on Ser-77 is crucial for transcriptional activity.,similarity:Belongs to the nuclear hormone receptor family.,similarity:Belongs to the nuclear</p> |
| <b>Background</b>                | <p>This gene represents a nuclear retinoic acid receptor. The encoded protein, retinoic acid receptor alpha, regulates transcription in a ligand-dependent manner. This gene has been implicated in regulation of development, differentiation, apoptosis, granulopoiesis, and transcription of clock genes. Translocations between this locus and several other loci have been associated with acute promyelocytic leukemia. Alternatively spliced transcript variants have been found for this locus.[provided by RefSeq, Sep 2010],</p>                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>matters needing attention</b> | <p>Avoid repeated freezing and thawing!</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Usage suggestions</b>         | <p>This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



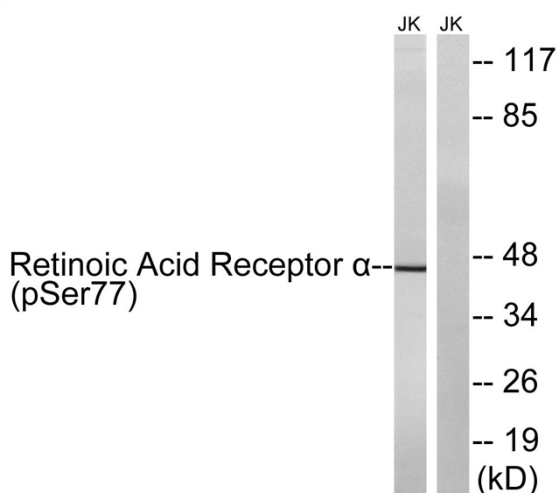
## Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Retinoic Acid Receptor alpha (Phospho-Ser77) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Retinoic Acid Receptor alpha (Phospho-Ser77) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from Jurkat cells treated with PMA 125ng/ml 30' and Jurkat cells treated with insulin 0.01U/ml 15', using Retinoic Acid Receptor alpha (Phospho-Ser77) Antibody. The lane on the right is blocked with the phosphopeptide.