



## RARA Polyclonal Antibody

E90370

**Catalog Number:** E90370**Amount:** 100ul

**Background:** Retinoids (vitamin A and its active retinoic acid derivatives) are non-steroid hormones that regulate cell proliferation, differentiation and apoptosis. Retinoic acid receptors (RAR $\alpha$ , - $\beta$  and - $\gamma$ ) and retinoid X receptors (RXR $\alpha$ , - $\beta$  and - $\gamma$ ) are nuclear receptors that function as RAR-RXR heterodimers or RXR homodimers (1-2). In response to retinoid binding, these dimers control gene expression by binding to specific retinoic acid response elements, by recruiting cofactors and the transcriptional machinery, and by indirectly regulating chromatin structure. Finally, ligand binding and phosphorylation of RAR $\alpha$  by JNK at Thr181, Ser445 and Ser461 controls the stability of RAR-RXR through the ubiquitin-proteasome pathway (3-4). At least four distinct genetic lesions affect RAR $\alpha$  and result in acute promyelocytic leukemia (APL). The t(15;17) translocation that results in the PML-RAR $\alpha$  fusion protein is responsible for more than 99% of APL cases, and the fusion protein inhibits PML-dependent apoptotic pathways in a dominant negative fashion. In addition PML-RAR $\alpha$  inhibits transcription of retinoic acid target genes by recruiting co-repressors, attenuating myeloid differentiation (5-6).

**Species:** Rabbit**Isotype:** IgG

**Storage/Stability:** Store at -20°C or -80°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Synonyms:** RARA ; RAR alpha; retinoic acid receptor, alpha; NR1B1;RAR

**Immunogen:** Recombinant protein of human RARA

**Purification:** Affinity purification

**Reactivity:** H M R

**Applications:** WB IHC

**Molecular Weight:** 51kDa

**Swiss-Prot No.:** P10276

**Gene ID:** 5914

**References:** 1. Mangelsdorf, D. J. et al. (1995) Cell 83, 835-839. 2. Mangelsdorf, D.J. and Evans, R.M. (1995) Cell 83, 841-850. 3. Bastien, J. and Rochette-Egly, C. (2004) Gene 328, 1-16. 4. Srinivas, H. et al. (2005) Mol. Cell. Biol. 25, 1054-1069. 5. de The, H. et al. (1990) Nature 347, 558-561. 6. Slack, J.L. and Rusiniak, M.E. (2000) Ann. Hematol. 79, 227-238.

WB 1:500 - 1:2000

IHC 1:50- 1:200

Western blot analysis of extracts of various celllines,  
using RARA antibody.