

Product datasheet for **TA326833**

Retinoic Acid Receptor alpha (RARA) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:50- 1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human RARA
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	retinoic acid receptor alpha
Database Link:	NP_000955 Entrez Gene 19401 Mouse Entrez Gene 24705 Rat Entrez Gene 5914 Human P10276



[View online »](#)

Background:

Retinoids (vitamin A and its active retinoic acid derivatives) are non-steroid hormones that regulate cell proliferation, differentiation and apoptosis. Retinoic acid receptors (RARAlpha, -beta and -gamma) and retinoid X receptors (RXRAlpha, -beta and -gamma) are nuclear receptors that function as RAR-RXR heterodimers or RXR homodimers. 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 RARAlpha by JNK at Thr181, Ser445 and Ser461 controls the stability of RAR-RXR through the ubiquitin-proteasome pathway. At least four distinct genetic lesions affect RARAlpha and result in acute promyelocytic leukemia (APL). The t(15;17) translocation that results in the PML-RARAlpha 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-RARAlpha inhibits transcription of retinoic acid target genes by recruiting co-repressors, attenuating myeloid differentiation.

Synonyms:

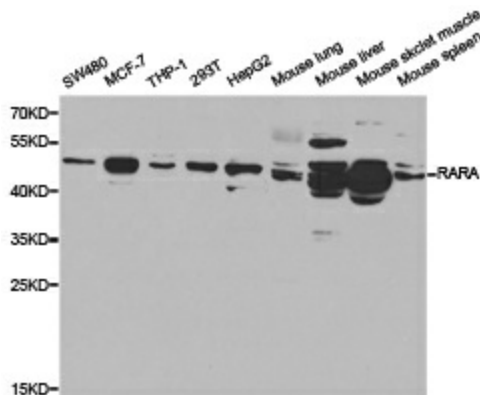
NR1B1; RAR

Protein Families:

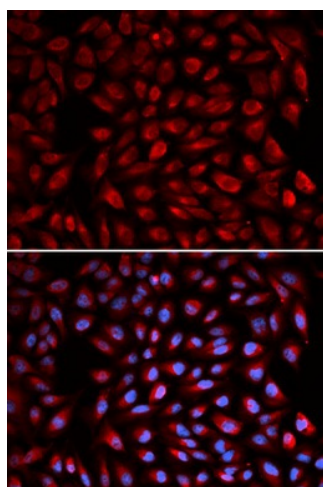
Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

Protein Pathways:

Acute myeloid leukemia, Pathways in cancer

Product images:

Western blot analysis of various cell lines, using RARA antibody.



Immunofluorescence analysis of U2OS cell using RARA antibody. Blue: DAPI for nuclear staining.