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**Product Name: NCoA-3 Rabbit Polyclonal Antibody****Catalog #: APRab14454**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
<b>Molecular Weight</b>	160kDa

**Antigen Information**

<b>Gene Name</b>	NCOA3
<b>Alternative Names</b>	NCOA3; AIB1; BHLHE42; RAC3; TRAM1; Nuclear receptor coactivator 3; NCoA-3; ACTR; Amplified in breast cancer 1 protein; AIB-1; CBP-interacting protein; pCIP; Class E basic helix-loop-helix protein 42; bHLHe42; Receptor-associated coactivator 3; RAC-3; Steroid receptor coactivator protein 3; SRC-3; Thyroid hormone receptor activator molecule 1; TRAM-1
<b>Gene ID</b>	8202.0
<b>SwissProt ID</b>	Q9Y6Q9
<b>Immunogen</b>	Synthesized peptide derived from the Internal region of human NCoA-3.

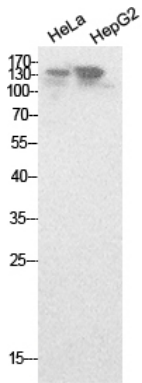
## Background

The protein encoded by this gene is a nuclear receptor coactivator that interacts with nuclear hormone receptors to enhance their transcriptional activator functions. The encoded protein has histone acetyltransferase activity and recruits p300/CBP-associated factor and CREB binding protein as part of a multisubunit coactivation complex. This protein is initially found in the cytoplasm but is translocated into the nucleus upon phosphorylation. Several transcript variants encoding different isoforms have been found for this gene. In addition, a polymorphic repeat region is found in the C-terminus of the encoded protein. [provided by RefSeq, Mar 2010], alternative products: Additional isoforms seem to exist, catalytic activity: Acetyl-CoA + histone = CoA + acetylhistone, domain: Contains three Leu-Xaa-Xaa-Leu-Leu (LXXLL) motifs. Motifs 1 and 2 are essential for the association with nuclear receptors, and constitute the RID domain (Receptor-interacting domain), enzyme regulation: Coactivator activity on nuclear receptors and NF-kappa-B pathways is enhanced by various hormones, and the TNF cytokine, respectively. TNF stimulation probably enhances phosphorylation, which in turn activates coactivator function. In contrast, acetylation by CREBBP apparently suppresses coactivation of target genes by disrupting its association with nuclear receptors, function: Nuclear receptor coactivator that directly binds nuclear receptors and stimulates the transcriptional activities in a hormone-dependent fashion. Plays a central role in creating a multisubunit coactivator complex, which probably acts via remodeling of chromatin. Involved in the coactivation of different nuclear receptors, such as for steroids (GR and ER), retinoids (RARs and RXRs), thyroid hormone (TRs), vitamin D3 (VDR) and prostanoids (PPARs). Displays histone acetyltransferase activity. Also involved in the coactivation of the NF-kappa-B pathway via its interaction with the NFKB1 subunit, miscellaneous: NCOA3 is frequently amplified or overexpressed in breast and ovarian cancers, polymorphism: The length of the poly-Gln region is polymorphic in the normal population, PTM: Acetylated by CREBBP. Acetylation occurs in the RID domain, and disrupts the interaction with nuclear receptors and regulates its function, PTM: Methylated by CARM1, PTM: Phosphorylated by IKK complex. Regulated its function, similarity: Belongs to the SRC/p160 nuclear receptor coactivator family, similarity: Contains 1 basic helix-loop-helix (bHLH) domain, similarity: Contains 1 PAS (PER-ARNT-SIM) domain, subcellular location: Mainly cytoplasmic and weakly nuclear. Upon TNF activation and subsequent phosphorylation, it translocates from the cytoplasm to the nucleus, subunit: Interacts with CARM1 (By similarity). Present in a complex containing NCOA2, IKKA, IKKB, IKBKG and the histone acetyltransferase protein CREBBP. Interacts with CASP8AP2, NR3C1 and PCAF. Interacts with ATAD2 and this interaction is enhanced by estradiol, tissue specificity: Widely expressed. High expression in heart, skeletal muscle, pancreas and placenta. Low expression in brain, and very low in lung, liver and kidney.

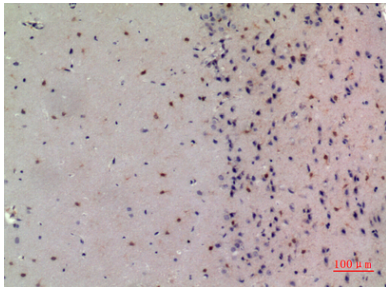
## Research Area

Pathways and Processes; Metabolic signaling pathways; Lipid and lipoprotein metabolism; Lipid metabolism; Metabolism; Types of disease; Obesity; Metabolism of lipids and lipoproteins; Signal transduction; Nuclear signaling; Nuclear hormone receptors; Coactivators and repressors; Cancer; Cancer Metabolism; Nuclear Signaling Pathways; Nuclear Receptors; Co-activators/co-repressors; Epigenetics and Nuclear Signaling; Chromatin Modifying Enzymes; Acetylation; HAT; Nuclear Signaling Pathways; Nuclear Receptors; Co-activators/co-repressors; Signaling Pathway; Nuclear Signaling

## Image Data



Western Blot analysis of HeLa, HepG2 cells using NCoA-3 Polyclonal Antibody..  
Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was  
diluted at 1:100