

# **NCOA1** Antibody

Rabbit Polyclonal Antibody Catalog # ABV11146

# **Specification**

## **NCOA1 Antibody - Product Information**

Application WB
Primary Accession O15788

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 156757

## **NCOA1 Antibody - Additional Information**

**Gene ID 8648** 

Positive Control Western Blot: Testis cell lysates

Application & Usage Western blot: 1:500 - 1:2000, IHC: 1:50 -

1:200.

**Other Names** 

NCOA1, FSRC1, KAT13A, MGC129719, MGC129720, NCoA1, RIP160, SRC1, SRC1, bHLHe42, bHLHe74, 6/G9a

Target/Specificity

NCOA1

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

**Formulation** 

100 μg of antibody in 100 μl PBS containing 0.02% sodium azide, 50% glycerol, pH 7.3

**Handling** 

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

#### **Precautions**

NCOA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



# **NCOA1 Antibody - Protein Information**

Name NCOA1

Synonyms BHLHE74, SRC1

#### **Function**

Nuclear receptor coactivator that directly binds nuclear receptors and stimulates the transcriptional activities in a hormone- dependent fashion. Involved in the coactivation of different nuclear receptors, such as for steroids (PGR, GR and ER), retinoids (RXRs), thyroid hormone (TRs) and prostanoids (PPARs). Also involved in coactivation mediated by STAT3, STAT5A, STAT5B and STAT6 transcription factors. Displays histone acetyltransferase activity toward H3 and H4; the relevance of such activity remains however unclear. Plays a central role in creating multisubunit coactivator complexes that act via remodeling of chromatin, and possibly acts by participating in both chromatin remodeling and recruitment of general transcription factors. Required with NCOA2 to control energy balance between white and brown adipose tissues. Required for mediating steroid hormone response. Isoform 2 has a higher thyroid hormone-dependent transactivation activity than isoform 1 and isoform 3.

**Cellular Location** 

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}.

**Tissue Location** 

Widely expressed.

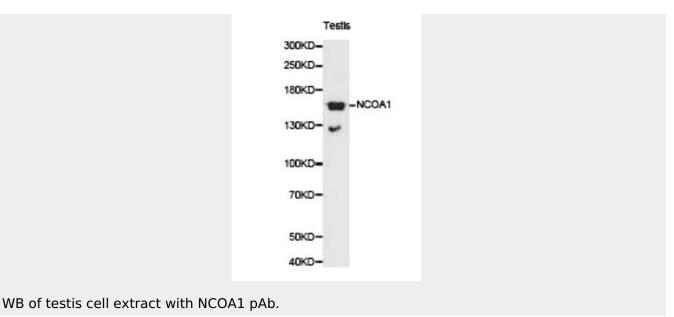
### **NCOA1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### NCOA1 Antibody - Images





## NCOA1 Antibody - Background

There are three members of the steroid receptor coactivator (SRC) family of proteins: SRC1 (NCoA-1), SRC2 (TIF2/GRIP1/NCoA2), and SRC3 (ACTR /TRAM1/AIB1). All SRC family members share significant structural homology and function to stimulate transcription mediated by nuclear hormone receptors and other transcriptional activators such as Stat3, NFkB, E2F1, and p53. Two SRC proteins, SRC1 and SRC3, function as histone acetyltransferases. In addition, all three family members can recruit other histone acetyltransferases (CBP/p300, PCAF) and histone methyltransferases (PRMT1, CARM1) to target promoters and cooperate to enhance expression of many genes. The SRC proteins play important roles in multiple physiological processes including cell proliferation, cell survival, somatic cell growth, mammary gland development, female reproductive function, and vasoprotection. SRC1 and SRC3 are conduits for kinase mediated growth factor signaling to the estrogen receptor and other transcriptional activators. Seven SRC1 phosphorylation sites and six SRC3 phosphorylation sites have been identified, which are induced by steroids, cytokines, and growth factors and involve multiple kinase signaling pathways. Research has shown that all three SRC family members are associated with increased activity of nuclear receptors in breast, prostate, and ovarian carcinomas. According to the literature, SRC3 is frequently amplified or overexpressed in a number of cancers, and SRC1/PAX3 and SRC2/MYST3 translocations are found associated with rhabdomyosarcoma and acute myeloid leukemia, respectively.