

ARA70 Polyclonal Antibody

Catalog # AP68485

Product Information

Application WB, IHC-P, IF, ICC

Primary Accession <u>Q13772</u>

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 69726

Additional Information

Gene ID 8031

Other Names NCOA4; ARA70; ELE1; RFG; Nuclear receptor coactivator 4; NCoA-4; Androgen

receptor coactivator 70 kDa protein; 70 kDa AR-activator; 70 kDa androgen receptor coactivator; Androgen receptor-associated protein of 70 kDa;

Ret-activating protein

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A

IF~~1:50~200 ICC~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name NCOA4

Synonyms ARA70 {ECO:0000303 | PubMed:8643607}, ELE1

Function Cargo receptor for the autophagic turnover of the iron- binding ferritin

complex, playing a central role in iron homeostasis (PubMed:<u>25327288</u>, PubMed:<u>26436293</u>). Acts as an adapter for delivery of ferritin to lysosomes and autophagic degradation of ferritin, a process named ferritinophagy (PubMed:<u>25327288</u>, PubMed:<u>26436293</u>). Targets the iron-binding ferritin

complex to autolysosomes following starvation or iron depletion

(PubMed:<u>25327288</u>). Ensures efficient erythropoiesis, possibly by regulating hemin-induced erythroid differentiation (PubMed:<u>26436293</u>). In some studies, has been shown to enhance the androgen receptor AR transcriptional activity as well as acting as ligand-independent coactivator of the peroxisome

proliferator-activated receptor (PPAR) gamma (PubMed: 10347167,

PubMed:<u>8643607</u>). Another study shows only weak behavior as a coactivator

for the androgen receptor and no alteration of the ligand responsiveness of the AR (PubMed:10517667). Binds to DNA replication origins, binding is not restricted to sites of active transcription and may likely be independent from the nuclear receptor transcriptional coactivator function (PubMed:24910095). May inhibit activation of DNA replication origins, possibly by obstructing DNA unwinding via interaction with the MCM2-7 complex (PubMed:24910095).

Cellular Location

Cytoplasmic vesicle, autophagosome. Autolysosome. Nucleus Chromosome

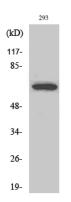
Tissue Location

Widely expressed. Also detected in adipose tissues and in different cell lines. Isoform Beta is only expressed in testis

Background

Enhances the androgen receptor transcriptional activity in prostate cancer cells. Ligand-independent coactivator of the peroxisome proliferator-activated receptor (PPAR) gamma.

Images



Western Blot analysis of various cells using ARA70 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.