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NCOA4 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM2019b

Product Information

Application	WB, E
Primary Accession	Q13772
Other Accession	NP_001138732.1
Reactivity	Human
Predicted	Mouse, Bovine, Canine
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Clone Names	439CT10.4.4
Calculated MW	69726

Additional Information

Gene ID	8031
Other Names	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 ELE1, NCOA4, ARA70, ELE1, RFG
Target/Specificity	Purified His-tagged NCOA4 protein(Fragment) was used to produced this monoclonal antibody.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NCOA4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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:25327288, PubMed:26436293). Acts as an adapter for delivery of ferritin to lysosomes and autophagic degradation of ferritin, a process named ferritinophagy (PubMed:25327288, PubMed:26436293). Targets the iron-binding ferritin complex to autolysosomes following starvation or iron depletion (PubMed:25327288). Ensures efficient erythropoiesis, possibly by regulating hemin-induced erythroid differentiation (PubMed:26436293). 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:8643607). 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

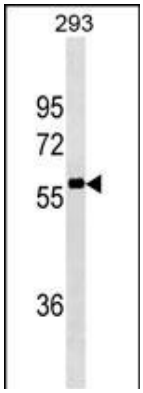
Background

This gene encodes an androgen receptor coactivator. The encoded protein interacts with the androgen receptor in a ligand-dependent manner to enhance its transcriptional activity. Chromosomal translocations between this gene and the ret tyrosine kinase gene, also located on chromosome 10, have been associated with papillary thyroid carcinoma. Alternatively spliced transcript variants have been described. Pseudogenes are present on chromosomes 4, 5, 10, and 14.

References

Sadow, P.M., et al. Endocr. Pathol. 21(2):73-79(2010)
Landa, I., et al. PLoS Genet. 5 (9), E1000637 (2009) :
Richardson, D.S., et al. Cancer Res. 69(11):4861-4869(2009)
Peng, Y., et al. Am. J. Pathol. 172(1):225-235(2008)
Bongarzone, I., et al. Genomics 42(2):252-259(1997)

Images



NCOA4 Antibody (Cat. #AM2019b) western blot analysis in 293 cell line lysates (35µg/lane).This demonstrates the NCOA4 antibody detected the NCOA4 protein (arrow).

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