# NCoA-7 (C-2): sc-393427



The Power to Question

#### **BACKGROUND**

Nuclear receptors for steroids, thyroid hormones and retinoic acids are ligand-dependent transcription factors that activate transcription through specific DNA binding sites in their target genes. NCoA-7 (nuclear receptor coactivator 7), also known as ESNA1 or ERAP140, is a 942 amino acid nuclear protein that enhances nuclear receptor transcriptional activities and coactivates several nuclear receptors including PPAR $\gamma$ , ER $\alpha$ , TR $\beta$ 1 and RAR $\alpha$ . Highly expressed in brain and weakly expressed in pancreas, bladder, ovary, spinal cord, prostate, mammary gland, ovary, uterus and stomach, NCoA-7 is a member of the Oxr1 family and contains one LysM repeat and a TLD domain. Six NCoA-7 isoforms are known to exist due to alternative splicing events, and the gene encoding NCoA-7 maps to human chromosome 6q22.32 and mouse chromosome 10 A4.

#### **REFERENCES**

- Halachmi, S., et al. 1994. Estrogen receptor-associated proteins: possible mediators of hormone-induced transcription. Science 264: 1455-1458.
- Nguyen, T.A., et al. 1999. Interactions of nuclear receptor coactivator/ corepressor proteins with the aryl hydrocarbon receptor complex. Arch. Biochem. Biophys. 367: 250-257.
- 3. Shao, W., et al. 2002. ERAP140, a conserved tissue-specific nuclear receptor coactivator. Mol. Cell. Biol. 22: 3358-3372.
- Durand, M., et al. 2007. The OXR domain defines a conserved family of eukaryotic oxidation resistance proteins. BMC Cell Biol. 8: 13.
- Arai, H., et al. 2008. ERAP140/Nbla10993 is a novel favorable prognostic indicator for neuroblastoma induced in response to retinoic acid. Oncol. Rep. 19: 1381-1388.

### **CHROMOSOMAL LOCATION**

Genetic locus: NCOA7 (human) mapping to 6q22.32; Ncoa7 (mouse) mapping to 10 A4.

#### **SOURCE**

NCoA-7 (C-2) is a mouse monoclonal antibody raised against amino acids 601-900 mapping near the C-terminus of NCoA-7 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g \ lgG_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NCoA-7 (C-2) is available conjugated to agarose (sc-393427 AC), 500  $\mu$ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393427 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393427 PE), fluorescein (sc-393427 FITC), Alexa Fluor® 488 (sc-393427 AF488), Alexa Fluor® 546 (sc-393427 AF546), Alexa Fluor® 594 (sc-393427 AF594) or Alexa Fluor® 647 (sc-393427 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393427 AF680) or Alexa Fluor® 790 (sc-393427 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **APPLICATIONS**

NCoA-7 (C-2) is recommended for detection of NCoA-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NCoA-7 siRNA (h): sc-95482, NCoA-7 siRNA (m): sc-149859, NCoA-7 shRNA Plasmid (h): sc-95482-SH, NCoA-7 shRNA Plasmid (m): sc-149859-SH, NCoA-7 shRNA (h) Lentiviral Particles: sc-95482-V and NCoA-7 shRNA (m) Lentiviral Particles: sc-149859-V.

Molecular Weight of (predicted) NCoA-7: 106 kDa.

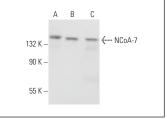
Molecular Weight of (observed) NCoA-7: 118-126 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HUV-EC-C whole cell lysate: sc-364180 or NIH/3T3 whole cell lysate: sc-2210.

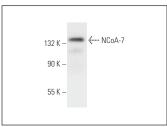
#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz\* Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz\* Mounting Medium: sc-24941 or UltraCruz\* Hard-set Mounting Medium: sc-359850.

## DATA







NCoA-7 (C-2): sc-393427. Western blot analysis of NCoA-7 expression in MCF7 whole cell lysate.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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