

CoREST (H-8): sc-376567

BACKGROUND

NRSF (neuron-restrictive silencer factor, also designated XBR and REST for RE1-silencing factor) is a silencer protein that represses neuronal gene transcription in non-neuronal cells. NRSF-mediated repression requires histone deacetylase activity because repressed genes are associated with hypoacetylated chromatin. HDAC is recruited to the NRSF repressor complex by two co-repressors, Sin3A and CoREST. CoREST interacts with a single zinc finger motif in the carboxy-terminal repressor domain of NRSF, whereas Sin3A interacts with NRSF's amino-terminal repressor domain. In addition, CoREST interacts with HDAC through a SANT domain, which is found in other HDAC interacting proteins such as NCoR, MTA1 and MTA2. CoREST is an integral component of the NRSF repressor complex. Its functionality has been conserved in several species, including human, mouse, *Xenopus*, and *C. elegans*.

CHROMOSOMAL LOCATION

Genetic locus: RCOR1 (human) mapping to 14q32.31; Rcor1 (mouse) mapping to 12 F1.

SOURCE

CoREST (H-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 431-469 near the C-terminus of CoREST of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CoREST (H-8) is available conjugated to agarose (sc-376567 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376567 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376567 PE), fluorescein (sc-376567 FITC), Alexa Fluor® 488 (sc-376567 AF488), Alexa Fluor® 546 (sc-376567 AF546), Alexa Fluor® 594 (sc-376567 AF594) or Alexa Fluor® 647 (sc-376567 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376567 AF680) or Alexa Fluor® 790 (sc-376567 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CoREST (H-8) is recommended for detection of CoREST 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 CoREST siRNA (h): sc-38131, CoREST siRNA (m): sc-142516, CoREST shRNA Plasmid (h): sc-38131-SH, CoREST shRNA Plasmid (m): sc-142516-SH, CoREST shRNA (h) Lentiviral Particles: sc-38131-V and CoREST shRNA (m) Lentiviral Particles: sc-142516-V.

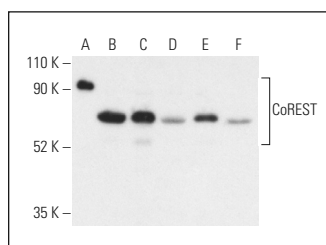
Molecular Weight of CoREST: 66 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, Hep G2 cell lysate: sc-2227 or MOLT-4 cell lysate: sc-2233.

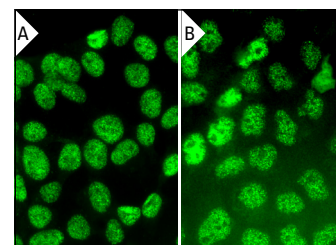
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



CoREST (H-8): sc-376567. Western blot analysis of full length human recombinant CoREST fusion protein (A) and CoREST expression in MCF7 (B), MOLT-4 (C), U-2 OS (D), Hep G2 (E) and A-431 (F) whole cell lysates. Detection reagent used: m-IgG₁ BP-HRP: sc-525408.



CoREST (H-8): sc-376567. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization (A). Immunofluorescence staining of formalin-fixed A-431 cells showing nuclear localization (B).

SELECT PRODUCT CITATIONS

- Boxer, L.D., et al. 2014. ZNF750 interacts with KLF4 and RCOR1, KDM1A, and CTBP1/2 chromatin regulators to repress epidermal progenitor genes and induce differentiation genes. *Genes Dev.* 28: 2013-2026.
- Lempiäinen, J.K., et al. 2017. Agonist-specific protein interactomes of glucocorticoid and androgen receptor as revealed by proximity mapping. *Mol. Cell. Proteomics* 16: 1462-1474.
- Li, L., et al. 2017. ZNF516 suppresses EGFR by targeting the CtBP/LSD1/CoREST complex to chromatin. *Nat. Commun.* 8: 691.
- Guo, Y., et al. 2022. Opposing roles of ZEB1 in the cytoplasm and nucleus control cytoskeletal assembly and YAP1 activity. *Cell Rep.* 41: 111452.
- Wu, Z., et al. 2023. YAP silencing by RB1 mutation is essential for small-cell lung cancer metastasis. *Nat. Commun.* 14: 5916.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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