NCOA3/SRC3 CUTANA™ CUT&RUN Antibody

Catalog No. 13-2013
Lot No. 21085001-04
Pack Size 100 µL

Type Polyclonal **Target Size** 155 kDa **Reactivity** Human
Host Rabbit **Format** Aff. Pur. IgG **Applications** CUT&RUN, WB

Product Description:

This antibody meets EpiCypher's "CUTANA Compatible" criteria for performance in Cleavage Under Targets and Release Using Nuclease (CUT&RUN) and/or Cleavage Under Targets and Tagmentation (CUT&Tag) approaches to genomic mapping. Every lot of a CUTANA Compatible antibody is tested in the indicated CUTANA approach using EpiCypher optimized protocols (EpiCypher.com/resources/protocols) and determined to yield peaks that show a genomic distribution pattern consistent with reported function(s) of the target protein. Consistent with its role as a nuclear receptor coactivator that facilitates ER-mediated transcription (1), NCOA3 (SRC3) antibody shows CUT&RUN peaks in response to estradiol stimulation (**Figure 1**) that overlap with known estrogen response element (ERE) binding motifs (**Figure 2**). SRC3 CUT&RUN peaks also overlap with ER alpha antibodies (N- and C-term) (**Figure 2**).

Immunogen:

A synthetic peptide corresponding to human NCOA3/SRC3 amino acids 900 - 950.

Formulation:

Antigen affinity-purified antibody (1.0 mg/mL) in Tris-citrate/phosphate buffer pH 7 to 8, 0.09% sodium azide.

Storage and Stability:

Stable for 1 year at 4°C from date of receipt.

Application Notes:

Recommended Dilutions:

CUT&RUN: 0.5 µg
WB: 1:2,000 - 1:10,000

References:

1. Wagner et al. (2013) *BMC Cancer* 4:13-570

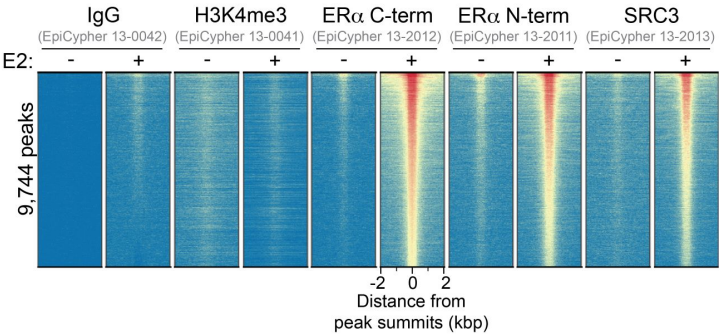

Figure 1: SRC3 enrichment in CUT&RUN. Serum-starved MCF7 cells were treated with 100 nM estradiol (E2) or vehicle control for 45 minutes. CUT&RUN was performed using 500,000 cells with 0.5 µg of each indicated antibody (gray text). Heatmap shows CUT&RUN enrichment in aligned rows ranked by intensity (top to bottom; relative to ER alpha C-term). Red indicates high localized enrichment and blue denotes background signal.

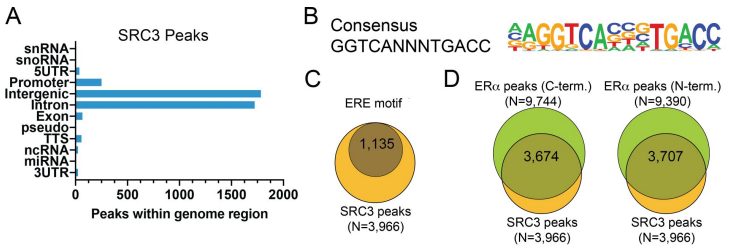

Figure 2: SRC3 peak analysis in CUT&RUN. Peaks from the E2-treated samples in Figure 1 were called using MACS2. (**A**) The number of SRC3 peaks which fall into distinct classes of functionally annotated genomic regions is plotted. (**B**) Homer analysis determined that the ERE consensus motif, represented as a sequence logo position weight matrix, was enriched under SRC3 peaks. (**C**) The number of SRC3 peaks containing consensus motifs from panel B is shown by Venn Diagram. (**D**) The number of SRC3 peaks that overlap with ER alpha C-term and ER alpha N-term antibodies are represented by Venn Diagram.

Applications Key: ChIP: Chromatin immunoprecipitation; CUT&RUN: Cleavage Under Targets and Release Using Nuclease; CUT&Tag: Cleavage Under Targets and Tagmentation; E: ELISA; FACS: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence; IHC: Immunohistochemistry; IP: Immunoprecipitation; L: Luminex; WB: Western Blot. **Reactivity Key**: B: Bovine; Ce: *C. elegans*; Ch: Chicken; Dm: *Drosophila*; Eu: Eukaryote; H: Human; M: Mouse; Ma: Mammal; R: Rat; Sc: *S.cerevesiae*; Sp: *S. pombe*; WR: Wide Range (predicted); X: Xenopus; Z: Zebrafish

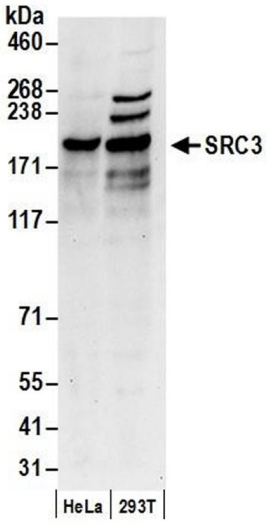

Figure 3: Western blot detection of human SRC3. Whole cell lysates were isolated from HeLa and HEK293T cells using NETN lysis buffer. Lysate (50 µg) was loaded onto 4-8% SDS-PAGE gel and analyzed under standard western blot conditions using SRC3 antibody (0.1 µg/mL).

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