# EPC1 (N-15): sc-48154



The Power to Question

## **BACKGROUND**

Enhancer of polycomb 1 (EPC1) is a member of the polycomb group (PcG) proteins. EPC1 interacts with the transcriptional repressor E2F6. In proliferating cells, the proliferation-specific PcG, EZH2, associates with this E2F6-EPC1 complex, which may regulate genes required for cell cycle promotion. EPC1 also interacts with a member of the RING finger protein family (RFP), and this complex functions as a transcriptional repressor. Lastly, EPC1 is a com-ponent of the NuA4 histone acetyltransferase (HAT) complex, which transcriptionally activates certain genes by acetylation of Histones H4 and H2A. This acetylation may alter nucleosome-DNA interactions and promote interaction of the modified histones with other positive transcription regulators. The HAT complex may play a role in oncogene/proto-oncogene growth induction, tumor suppressor growth arrest, replicative senescence, apoptosis and DNA repair.

# **CHROMOSOMAL LOCATION**

Genetic locus: EPC1 (human) mapping to 10p11.22; Epc1 (mouse) mapping to 18 A1.

#### **SOURCE**

EPC1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EPC1 of human origin.

# **PRODUCT**

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

Blocking peptide available for competition studies, sc-48151 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48151 X, 200  $\mu g/0.1$  ml.

# **APPLICATIONS**

EPC1 (N-15) is recommended for detection of EPC1 isoforms 1-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

EPC1 (N-15) is also recommended for detection of EPC1 isoforms 1-4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EPC1 siRNA (h): sc-60589, EPC1 siRNA (m): sc-60590, EPC1 shRNA Plasmid (h): sc-60589-SH, EPC1 shRNA Plasmid (m): sc-60590-SH, EPC1 shRNA (h) Lentiviral Particles: sc-60589-V and EPC1 shRNA (m) Lentiviral Particles: sc-60590-V.

EPC1 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

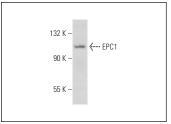
Molecular Weight of EPC1: 92 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **DATA**



EPC1 (N-15): sc-48154. Western blot analysis of EPC1 expression in HeLa nuclear extract.

#### **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 or our catalog for detailed protocols and support products.



Try **EPC1 (D-6): sc-373840**, our highly recommended monoclonal alternative to EPC1 (N-15).

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