

# EPC2 (G-14): sc-167761

## BACKGROUND

In *Drosophila*, Polycomb (Pc-g) gene family encodes chromatin proteins that are required for the repression of homeotic loci in embryonic development. EPC2, an 807 amino acid nuclear protein, is a mammalian homolog of *Drosophila* Pc-g group proteins. EPC2 is suggested to be involved in transcription or DNA repair. The gene encoding EPC2 maps to human chromosome 2 and mouse chromosome 2C1.1, which houses over 1,400 genes and comprises nearly 8% of the human genome and comprises nearly 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, sitosterolemia and Alström syndrome. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: EPC2 (human) mapping to 2q23.1; Epc2 (mouse) mapping to 2 C1.1.

## SOURCE

EPC2 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EPC2 of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167761 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

EPC2 (G-14) is recommended for detection of EPC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with EPC1.

EPC2 (G-14) is also recommended for detection of EPC2 in additional species, including equine, canine and avian.

Suitable for use as control antibody for EPC2 siRNA (h): sc-95045, EPC2 siRNA (m): sc-144905, EPC2 shRNA Plasmid (h): sc-95045-SH, EPC2 shRNA Plasmid (m): sc-144905-SH, EPC2 shRNA (h) Lentiviral Particles: sc-95045-V and EPC2 shRNA (m) Lentiviral Particles: sc-144905-V.

Molecular Weight of EPC2: 91 kDa.

## 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.