

PHC2 (K-12): sc-160664

BACKGROUND

Polycomb group (PcG) proteins assemble into multimeric protein complexes, which are involved in maintaining the transcriptional repressive state of genes throughout development. PHC2 (polyhomeotic-like protein 2), also known as early development regulatory protein 2, is an 858 amino acid nuclear protein that is a component of the PcG multiprotein PRC1 complex. Specifically, the PcG PRC1 complex modifies histones, remodels chromatin and mediates monoubiquitination of Histone H2A. Other constituent proteins involved in the PcG PRC1 complex are Mel-18, Bmi-1, M33, MPc2, MPc3, RING1, Ring1b, as well as several others. Phosphorylated upon DNA damage, PHC2 contains one SAM (sterile alpha motif) domain and one FCS-type zinc finger.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PHC2 (human) mapping to 1p35.1; Phc2 (mouse) mapping to 4 D2.2.

SOURCE

PHC2 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PHC2 of human origin.

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-160664 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PHC2 (K-12) is recommended for detection of PHC2 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 PHC1 or PHC3.

PHC2 (K-12) is also recommended for detection of PHC2 in additional species, including porcine.

Suitable for use as control antibody for PHC2 siRNA (h): sc-88797, PHC2 siRNA (m): sc-152204, PHC2 shRNA Plasmid (h): sc-88797-SH, PHC2 shRNA Plasmid (m): sc-152204-SH, PHC2 shRNA (h) Lentiviral Particles: sc-88797-V and PHC2 shRNA (m) Lentiviral Particles: sc-152204-V.

Molecular Weight of PHC2: 90 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.

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.