PHF21A (G-12): sc-109845



The Power to Question

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. PHF21A (PHD finger protein 21A), also known as BRAF35-HDAC complex protein BHC80, is a 680 amino acid nuclear protein that contains one PHD-type zinc finger and one A.T hook DNA-binding domain, suggesting involvement in transcriptional regulation events. PHF21A is a component of the BHC complex, which is responsible for repressing transcription of neuron-specific genes in non-neuronal cells. The BHC complex acts as a chromatin modifier that deacetylates and demethylates specific sites on histones. PHF21A may act as a scaffold within the BHC complex. Predominantly expressed in brain, three isoforms of PHF21A exist as a result of alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: PHF21A (human) mapping to 11p11.2; Phf21a (mouse) mapping to 2 E1.

SOURCE

PHF21A (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PHF21A of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-109845 P, (100 μ 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-109845 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

PHF21A (G-12) is recommended for detection of PHF21A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with other PHF family members.

PHF21A (G-12) is also recommended for detection of PHF21A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PHF21A siRNA (h): sc-96691, PHF21A siRNA (m): sc-152215, PHF21A shRNA Plasmid (h): sc-96691-SH, PHF21A shRNA Plasmid (m): sc-152215-SH, PHF21A shRNA (h) Lentiviral Particles: sc-96691-V and PHF21A shRNA (m) Lentiviral Particles: sc-152215-V.

PHF21A (G-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

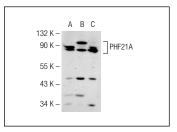
Molecular Weight of PHF21A: 75 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, SK-N-MC cell lysate: sc-2237 or SH-SY5Y cell lysate: sc-3812.

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



PHF21A (G-12): sc-109845. Western blot analysis of PHF21A expression in IMR-32 (**A**), SK-N-MC (**B**) and SH-SY5Y (**C**) nuclear extracts.

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 α -1-Microglobulin (10A12): sc-135665, our highly recommended monoclonal alternative to α -1-Microglobulin (G-15).

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