PHF6 (C-6): sc-514644

**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. PHF6 (PHD finger protein 6), also known as BO RJ, is a 385 amino acid protein that localizes to the nucleus and contains 2 PHD-type zinc fingers. Expressed ubiquitously, PHF6 exists as two alternatively spliced isoforms and is thought to play a role in transcriptional regulation. Upon DNA damage, PHF6 is subject to phosphorylation, probably by ATM or ATR. Mutations in the gene encoding PHF6 are the cause of Boerjeson-Forsman-Lehmann syndrome (BFLS), an X-linked recessive disorder that is characterized by mental retardation, epilepsy, hypogonadism, hypometabolism, obesity with marked gynecomastia, swelling of subcutaneous tissue of the face and narrow palpebral fissure.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PHF6 (human) mapping to Xq26.2; Phf6 (mouse) mapping to X A5.

**SOURCE**

PHF6 (C-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 52-69 within an internal region of PHF6 of human origin.

**RESEARCH USE**

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

**PRODUCT**

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514644 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

PHF6 (C-6) is recommended for detection of PHF6 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for PHF6 siRNA (h): sc-90882, PHF6 siRNA (m): sc-152219, PHF6 shRNA Plasmid (h): sc-90882 SH, PHF6 shRNA Plasmid (m): sc-152219-SH, PHF6 shRNA (h) Lentiviral Particles: sc-90882-V and PHF6 shRNA (m) Lentiviral Particles: sc-152219-V.

Molecular Weight of PHF6 isoforms: 41/35 kDa.

Positive Controls: A-431 nuclear extract: sc-2122, RT-4 whole cell lysate: sc-364257 or K-562 whole cell lysate: sc-2203.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102 CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

**DATA**

PHF6 (C-6): sc-514644. Western blot analysis of PHF6 expression in K-562 (A), HeLa (C) and Jurkat (F) nuclear extracts and K-562 (E) and RT-4 (F) whole cell lysates.

PHF6 (C-6): sc-514644. Western blot analysis of PHF6 expression in MCF7 whole cell lysate.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.