

PHTF2 (T-15): sc-137667

BACKGROUND

PHTF2 (putative homeodomain transcription factor 2) is a 785 amino acid protein that contains one basic helix-loop-helix (bHLH) domain and belongs to the PHTF family. Homologous to PHTF1, PHTF2 exhibits strongest similarity with putative homeodomains and both N- and C-terminal regions. Existing as four alternatively spliced isoforms, PHTF2 localizes to nucleus and participates in DNA binding. PHTF2 may also play a role in transcriptional regulation. While PHTF1 is expressed mainly in testis, PHTF2 is predominantly expressed in muscle, which suggests that both may have acquired different functions after their duplication and divergence. The gene that encodes PHTF2 maps to human chromosome 7q11.23.

REFERENCES

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- Oyhenart, J., et al. 2005. Putative homeodomain transcription factor 1 interacts with the feminization factor homolog fem1b in male germ cells. *Biol. Reprod.* 72: 780-787.
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CHROMOSOMAL LOCATION

Genetic locus: PHTF2 (human) mapping to 7q11.23; Phtf2 (mouse) mapping to 5 A3.

SOURCE

PHTF2 (T-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of PHTF2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137667 P, (100 µg 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-137667 X, 200 µg/0.1 ml.

APPLICATIONS

PHTF2 (T-15) is recommended for detection of PHTF2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with PHTF1.

PHTF2 (T-15) is also recommended for detection of PHTF2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PHTF2 siRNA (h): sc-89858, PHTF2 siRNA (m): sc-152238, PHTF2 shRNA Plasmid (h): sc-89858-SH, PHTF2 shRNA Plasmid (m): sc-152238-SH, PHTF2 shRNA (h) Lentiviral Particles: sc-89858-V and PHTF2 shRNA (m) Lentiviral Particles: sc-152238-V.

PHTF2 (T-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PHTF2 isoform 1/2/3/4: 89/85/85/78 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.