

Pirh2 (E-10): sc-376127

BACKGROUND

Pirh2, also known as androgen receptor N-terminal-interacting protein (ARNIP), ZN363 or CHIMP, has p53-induced ubiquitin-protein ligase activity, promoting p53 degradation. The protein physically interacts with p53 and the resulting degradation of p53 renders Pirh2 an oncogenic protein, as the loss of p53 function contributes to malignant tumor development. The gene encoding for the protein maps to chromosome 4q21.1; transcription of this gene is regulated by p53. Pirh2 expression decreases the level of p53, and a decrease of endogenous Pirh2 expression increases p53 levels. Pirh2 is therefore considered, together with MDM2, to act as a negative regulator of p53 function.

REFERENCES

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2. Leng, R.P., et al. 2003. Pirh2, a p53-induced ubiquitin-protein ligase, promotes p53 degradation. *Cell* 112: 779-791.
3. Duan, W., et al. 2004. Expression of Pirh2, a newly identified ubiquitin protein ligase, in lung cancer. *J. Natl. Cancer Inst.* 96: 1718-1721.
4. Corcoran, C.A., et al. 2004. The p53 paddy wagon: COP1, Pirh2 and MDM2 are found resisting apoptosis and growth arrest. *Cancer Biol. Ther.* 3: 721-725.
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6. Martoriati, A., et al. 2005. dapk1, encoding an activator of a p19^{ARF}-p53-mediated apoptotic checkpoint, is a transcription target of p53. *Oncogene* 24: 1461-1466.
7. Zhang, L., et al. 2005. A new human gene hNTKL-BP1 interacts with hPirh2. *Biochem. Biophys. Res. Commun.* 330: 293-297.
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CHROMOSOMAL LOCATION

Genetic locus: RCHY1 (human) mapping to 4q21.1; Rchy1 (mouse) mapping to 5 E2.

SOURCE

Pirh2 (E-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 183-221 within an internal region of Pirh2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376127 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-376127 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Pirh2 (E-10) is recommended for detection of Pirh2 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).

Pirh2 (E-10) is also recommended for detection of Pirh2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Pirh2 siRNA (h): sc-45424, Pirh2 siRNA (m): sc-45425, Pirh2 shRNA Plasmid (h): sc-45424-SH, Pirh2 shRNA Plasmid (m): sc-45425-SH, Pirh2 shRNA (h) Lentiviral Particles: sc-45424-V and Pirh2 shRNA (m) Lentiviral Particles: sc-45425-V.

Pirh2 (E-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

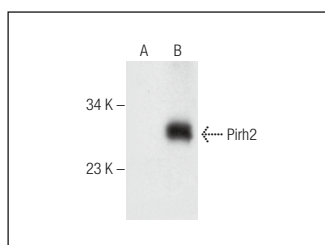
Molecular Weight of Pirh2: 30 kDa.

Positive Controls: Pirh2 (m2): 293T Lysate: sc-122593.

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, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Pirh2 (E-10): sc-376127. Western blot analysis of Pirh2 expression in non-transfected: sc-117752 (A) and mouse Pirh2 transfected: sc-122593 (B) 293T whole cell lysates.

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.