

DZIP3 (Y-18): sc-99872

BACKGROUND

Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). DZIP3 (DA Z-interacting protein 3, zinc finger), also known as UURF2 or hRUL138, is a 1,208 amino acid protein that localizes to the cytoplasm and contains one RING-type zinc finger. Expressed in a variety of tissues with highest expression in heart, skeletal muscle and kidney, DZIP3 functions as an E3 ubiquitin-protein ligase that accepts ubiquitin from an E2 ubiquitin-conjugating enzyme, thereby playing a role in signaling events throughout the cell. Multiple isoforms of DZIP3 exist due to alternative splicing events.

REFERENCES

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2. Ciechanover, A. and Schwartz, A.L. 1994. The ubiquitin-mediated proteolytic pathway: mechanisms of recognition of the proteolytic substrate and involvement in the degradation of native cellular proteins. *FASEB J.* 8: 182-191.
3. Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. *Curr. Opin. Struct. Biol.* 6: 395-401.
4. Ishikawa, K., et al. 1998. Prediction of the coding sequences of unidentified human genes. X. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. *DNA Res.* 5: 169-176.
5. Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
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CHROMOSOMAL LOCATION

Genetic locus: DZIP3 (human) mapping to 3q13.13; Dzip3 (mouse) mapping to 16 B5.

SOURCE

DZIP3 (Y-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DZIP3 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-99872 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

DZIP3 (Y-18) is recommended for detection of DZIP3 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 DZIP1 or DZIP1L.

DZIP3 (Y-18) is also recommended for detection of DZIP3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for DZIP3 siRNA (h): sc-78433, DZIP3 siRNA (m): sc-143214, DZIP3 shRNA Plasmid (h): sc-78433-SH, DZIP3 shRNA Plasmid (m): sc-143214-SH, DZIP3 shRNA (h) Lentiviral Particles: sc-78433-V and DZIP3 shRNA (m) Lentiviral Particles: sc-143214-V.

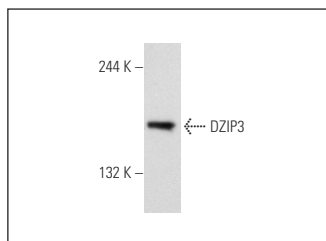
Molecular Weight of DZIP3 isoforms: 139/35 kDa.

Positive Controls: mouse liver extract: sc-2256.

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



DZIP3 (Y-18): sc-99872. Western blot analysis of DZIP3 expression in mouse liver tissue extract.

RESEARCH USE

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

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Try **DZIP3 (C-1): sc-514725**, our highly recommended monoclonal alternative to DZIP3 (Y-18).