

NP220 (D-13): sc-161132

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. NP220 (nuclear protein 220), also designated zinc-finger protein 638 (ZNF638) or cutaneous T cell lymphoma-associated antigen Se33-1, is a 1,978 amino acid protein that contains one matrix-type zinc finger and 2 RRM (RNA recognition motif) domains, suggesting a role in transcriptional regulation. NP220 binds to double-stranded DNA fragments by recognizing clusters of cytidines. NP220 interacts with FHL-2 and is also thought to be phosphorylated by ATM or ATR upon DNA damage. It exists as five isoforms as a result of alternative splicing events. Isoform five of NP220 is a tumor-associated antigen found in several cutaneous T cell lymphoma (CTCL), and in particular in mycosis fungoides patients and in Sezary syndrome patients.

REFERENCES

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STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: ZNF638 (human) mapping to 2p13.2; Zfml (mouse) mapping to 6 C3.

SOURCE

NP220 (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NP220 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-161132 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-161132 X, 200 µg/0.1 ml.

APPLICATIONS

NP220 (D-13) is recommended for detection of NP220 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

NP220 (D-13) is also recommended for detection of NP220 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for NP220 siRNA (h): sc-94523, NP220 siRNA (m): sc-150040, NP220 shRNA Plasmid (h): sc-94523-SH, NP220 shRNA Plasmid (m): sc-150040-SH, NP220 shRNA (h) Lentiviral Particles: sc-94523-V and NP220 shRNA (m) Lentiviral Particles: sc-150040-V.

NP220 (D-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NP220: 221/92/218/128/119 kDa.

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) 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.

RESEARCH USE

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