

DET1 (G-14): sc-164172

BACKGROUND

DET1 (de-etiolated homolog 1), is a 550 amino acid highly conserved nuclear protein that is expressed in the ovary, some lymphoid organs and resting leukocytes. DET1 is a component of the E3 ubiquitin ligase Doublecortin DET1-COP1 complex, which is required for ubiquitination and degradation of proto-oncogenic transcription factor c-Jun. DET1 enhances the activity of several members of the UBC (Ub-conjugating enzyme) family and modulates Cul-4A functions. DET1 is involved in multiple plant developmental processes and acts as an essential negative regulator of photomorphogenesis.

REFERENCES

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6. Pick, E., et al. 2007. Mammalian DET1 regulates Cul4A activity and forms stable complexes with E2 ubiquitin-conjugating enzymes. *Mol. Cell. Biol.* 27: 4708-4719.
7. Anzi, S., et al. 2008. Transcriptional repression of c-Jun's E3 ubiquitin ligases contributes to c-Jun induction by UV. *Cell. Signal.* 20: 862-871.
8. Zhang, Y., et al. 2008. *Arabidopsis* DDB1-CUL4 ASSOCIATED FACTOR1 forms a nuclear E3 ubiquitin ligase with DDB1 and CUL4 that is involved in multiple plant developmental processes. *Plant Cell* 20: 1437-1455.

CHROMOSOMAL LOCATION

Genetic locus: DET1 (human) mapping to 15q25.3; Det1 (mouse) mapping to 7 D3.

SOURCE

DET1 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DET1 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-164172 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DET1 (G-14) is recommended for detection of DET1 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).

DET1 (G-14) is also recommended for detection of DET1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DET1 siRNA (h): sc-89981, DET1 siRNA (m): sc-143015, DET1 shRNA Plasmid (h): sc-89981-SH, DET1 shRNA Plasmid (m): sc-143015-SH, DET1 shRNA (h) Lentiviral Particles: sc-89981-V and DET1 shRNA (m) Lentiviral Particles: sc-143015-V.

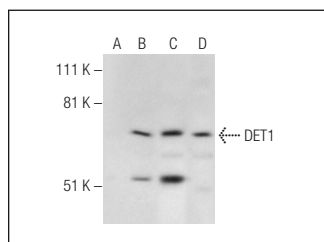
Molecular Weight of DET1: 64 kDa.

Positive Controls: DET1 (m): 293T Lysate: sc-126725, DU 145 cell lysate: sc-2268 or CCRF-CEM nuclear extract: sc-2146.

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



DET1 (G-14): sc-164172. Western blot analysis of DET1 expression in non-transfected 293T: sc-117752 (A), mouse DET1 transfected 293T: sc-126725 (B) and DU 145 (C) whole cell lysates and CCRF-CEM nuclear extract (D).

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.