

## EF7-B Antibody

#Cat: NB-19-0006

Size: 0,1ml

### Immunogen Data

**Description:** Belongs to the E2F/DP family and inhibits the E2F-dependent transcription. Binds DNA independently of DP proteins through the E2F recognition site, 5'-TTTC[CG]CGC-3'. Appears to regulate a subset of E2F-dependent genes whose products are required for normal cell cycle progression. Modulates the activity of other E2F proteins, such as E2F1, probably by competing or displacing activating E2Fs from binding to its promoter. E2F7 acts upstream of E2F1, limiting its expression, and thus influencing the ability of cells to undergo a DNA-damage response and apoptosis. This role is critical for mouse development.

**Immunogen:** KLH-conjugated synthetic peptide specific for E2F7 isoform 1 (E2F7-B).

**Alternative names:** E2F7 isoform 1, E2F7-B.

**UniProt ID:** Q96AV8-2.

**Mol. Weight:** 99.8 kDa.

### Antibody Data

**Host:** Rabbit

**Clonality:** Polyclonal

**Species Reactivity:** Human. Its reactivity against other species has not been determined.

**Volume:** 100 µl

**Purity:** Crude polyclonal rabbit serum

**Storage Buffer:** Without preservatives.

**Storage Instruction:** Aliquot and store at -20°C for short term or -80°C for long term. Avoid freeze-thaw cycles.

### Tested applications

Western Blot, Immunoprecipitation and Electrophoretic Mobility Shift Assay. The usefulness of this product in other applications has not been determined.

**Recommended Dilutions:**

**WB:** 1:5000

**EMSA:** 2 µl of undiluted pab

**IP:** 2 µl of undiluted pab

### Background references

(1) Di Stefano, L. et al. (2003) *EMBO J.* 22:6289-6298.

(2) Logan, N. et al. (2004) *Oncogene.* 23:5138-5150.

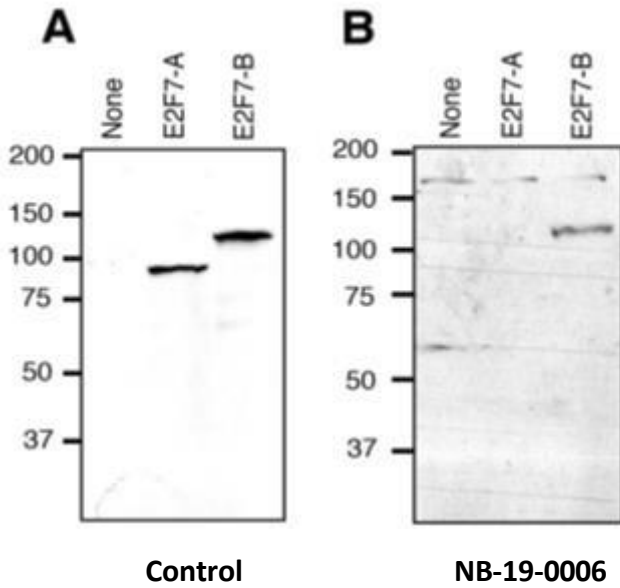
(3) Zalmas, L.P. et al. (2008) *EMBO Rep.* 9:252-259.

(4) Jing, L. et al. (2008) *Dev. Cell.* 14:62-75.

### Applicated references

Alvaro-Blanco, J. et al. (2009) *Carcinogenesis.* 30:440-

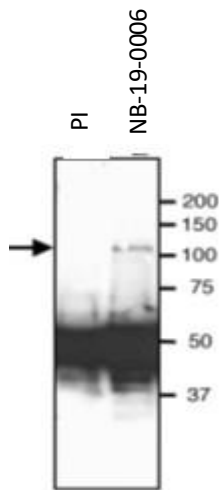
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**1. The NB-19-0006 Antibody recognizes E2F7 isoform 1 (E2F7-B), but not E2F7 isoform 2 (E2F7-A).**

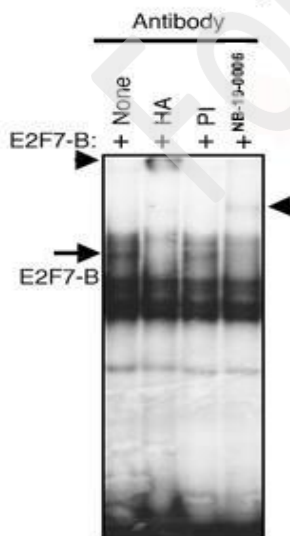
Whole cell extracts (10 µg) from Saos-2 cells transfected with either mock pcDNA3 (None), pcDNA3-HA-E2F7-A (E2F7-A), or pcDNA3-HAE2F7-B (E2F7-B) were fractionated on an 8% SDS-PAGE, transferred to nitrocellulose membranes, and probed with a previously described anti-E2F7 antibody (Control) (1) or the anti-E2F7-B NB-19-0006 antibody.

Peroxidase-conjugated anti-rabbit antibodies followed by ECL were then used. As shown in panel B, the NB-19-0006 antibody recognizes E2F7-B, but not E2F7-A.



**2. The NB-19-0006 Antibody immunoprecipitates endogenous E2F7-B.**

500 µg of whole cell extracts from K562 cells were immunoprecipitated with 2 µl of the NB-19-0006 crude rabbit serum or the corresponding pre-immunem serum (PI). Immunoprecipitated proteins were fractionated on 8% SDS-PAGE and transferred to nitrocellulose membranes. The membranes were then probed with a previously described anti-E2F7 antibody (1). Peroxidase-conjugated anti-rabbit antibodies followed by ECL were then used. The arrow points to immunoprecipitated E2F7-B.



**3. The anti-E2F7-B NB-19-0006 antibody is able to supershift a DNA-protein complex that contains E2F7-B.**

Complex formation employing a radiolabeled E2F element from the human DHFR promoter and nuclear extracts from Saos-2 cells transfected with pcDNA3-HAE2F7-B (+) were analyzed by EMSA. Extracts were preincubated in the absence (None) or in the presence of an antibody to the HA tag, anti-E2F7-B NB-19-0006 antibody, or the corresponding pre-immune serum (PI). The arrow indicates the position of the HA-E2F7-B-containing complex, whereas arrowheads indicate the position of super-shifted complexes.

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