

E2F-6 (E-20): sc-8366

BACKGROUND

The human retinoblastoma gene product appears to play an important role in the negative regulation of cell proliferation. Functional inactivation of Rb can be mediated either through mutation or as a consequence of interaction with DNA tumor virus encoded proteins. Of all the Rb associations described to date, the identification of a complex between Rb and the transcription factor E2F most directly implicates Rb in regulation of cell proliferation. E2F was originally identified through its role in transcriptional activation of the adenovirus E2 promoter. Sequences homologous to the E2F binding site have been found upstream of a number of genes that encode proteins with putative functions in the G₁ and S phases of the cell cycle. E2F-1 is a member of a broader family of transcription regulators including E2F-2, E2F-3, E2F-4, E2F-5, E2F-6 and E2F-7, each of which forms heterodimers with a second protein, DP-1, forming an "active" E2F transcriptional regulatory complex.

CHROMOSOMAL LOCATION

Genetic locus: E2F6 (human) mapping to 2p25.1; E2f6 (mouse) mapping to 12 A1.1.

SOURCE

E2F-6 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of E2F-6 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8366 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-8366 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

E2F-6 (E-20) is recommended for detection of E2F-6 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).

E2F-6 (E-20) is also recommended for detection of E2F-6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for E2F-6 siRNA (h): sc-37819, E2F-6 siRNA (m): sc-37820, E2F-6 shRNA Plasmid (h): sc-37819-SH, E2F-6 shRNA Plasmid (m): sc-37820-SH, E2F-6 shRNA (h) Lentiviral Particles: sc-37819-V and E2F-6 shRNA (m) Lentiviral Particles: sc-37820-V.

E2F-6 (E-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of E2F-6: 35 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or HeLa nuclear extract: sc-2120.

STORAGE

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

SELECT PRODUCT CITATIONS

- Weinmann, A.S., et al. 2001. Use of chromatin immunoprecipitation to clone novel E2F target promoters. *Mol. Cell. Biol.* 21: 6820-6832.
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- Sánchez-Beato, M., et al. 2004. Abnormal PcG protein expression in Hodgkin's lymphoma. Relation with E2F-6 and NFκB transcription factors. *J. Pathol.* 204: 528-537.
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- Deshpande, A.M., et al. 2007. PHC3, a component of the hPRC-H complex, associates with E2F-6 during G₀ and is lost in osteosarcoma tumors. *Oncogene* 26: 1714-1722.
- McLaughlin-Drubin, M.E., et al. 2008. Human papillomavirus type 16 E7 oncoprotein associates with E2F-6. *J. Virol.* 82: 8695-8705.
- Courel, M., et al. 2008. E2F-6 and Bmi-1 cooperate in axial skeletal development. *Dev. Dyn.* 237: 1232-1242.

RESEARCH USE

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

PROTOCOLS

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


 MONOS
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Try **E2F-6 (TFE61): sc-53273** or **E2F-6 (E-5): sc-390022**, our highly recommended monoclonal alternatives to E2F-6 (E-20).