E2F-1 (KH95): sc-251

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 transcriptional regulators including E2F-2, E2F-3, E2F-4, E2F-5 and E2F-6, each of which forms heterodimers with a second protein, DP-1, forming an “active” E2F transcriptional regulatory complex.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: E2F1 [human] mapping to 20q11.22; E2F1 [mouse] mapping to 2H1.

SOURCE
E2F-1 (KH95) is a mouse monoclonal antibody raised against amino acids 342-386 of E2F-1 of human origin.

PRODUCT
Each vial contains 200 µg IgGkappa light chain 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-251 X, 200 µg/0.1 ml.

E2F-1 (KH95) is available conjugated to agarose (sc-251 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-251 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycocerythrin (sc-251 PE), fluorescein (sc-251 FITC), Alexa Fluor® 488 (sc-251 AF488), Alexa Fluor® 546 (sc-251 AF546), Alexa Fluor® 594 (sc-251 AF594) or Alexa Fluor® 647 (sc-251 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-251 AF680) or Alexa Fluor® 790 (sc-251 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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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.

APPLICATIONS
E2F-1 (KH95) is recommended for detection of E2F-1 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 immunohistochemistry [including paraffin-embedded sections] [starting dilution 1:50, dilution range 1:50-1:500].


Positive Controls: HeLa whole cell lysate: sc-2200, HeLa nuclear extract: sc-2120 or HEL 92.1.7 cell lysate: sc-2270.

E2F-1 (KH95) X TransCruz antibody is recommended for Gel Supershift and ChiP applications.

Molecular Weight of E2F-1: 60 kDa.

SELECT PRODUCT CITATIONS

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