**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.

**CHROMOSOMAL LOCATION**

Genetic locus: E2F1 (human) mapping to 20q11.22; E2f1 (mouse) mapping to 2H1.

**SOURCE**

E2F-1 (KH20) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-89 of E2F-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

E2F-1 (KH20) 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) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]. Suitable for use as control antibody for E2F-1 siRNA (h): sc-29297, E2F-1 siRNA (m): sc-35247, E2F-1 siRNA (r): sc-61861, E2F-1 shRNA Plasmid (h): sc-29297-SH, E2F-1 shRNA Plasmid (m): sc-35247-SH, E2F-1 shRNA Plasmid (r): sc-61861-SH, E2F-1 shRNA (h) Lentiviral Particles: sc-29297-V, E2F-1 shRNA (m) Lentiviral Particles: sc-35247-V and E2F-1 shRNA (r) Lentiviral Particles: sc-61861-V.

Molecular Weight of E2F-1: 60 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HEL 92.1.7 cell lysate: sc-2270 or MOLT-4 cell lysate: sc-2233.

**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 for detailed protocols and support products.

**RESEARCH USE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


See **E2F-1 (KH95): sc-251** for E2F-1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.