

Anti-E2F1 p-Ser364 antibody, mouse monoclonal (#2)

71-151 100 µg

Shipping and Storage: Shipped at 4°C or -20°C and stored at -20°C.

Immunogen: A synthetic peptide corresponding to a sequence of human E2F1 protein including and surrounding phospho-Ser364

Form: Purified IgG 1 mg/ml in PBS- with 50% glycerol

Purity: Mouse monoclonal antibody (clone #2) specific to the human E2F1 protein phosphorylated at Ser364. Produced in serum-free medium and purified under mild conditions

Isotype: IgG2b κ

Reactivity: Human E2F1 protein phosphorylated at Ser364. Not tested with other species.

Applications

1. Western blotting (~1 µg/ml)
2. ELISA

Not tested for other applications.

Background: E2F1 is a member of E2F group of proteins that share common structural and functional domains and plays a major role during the G1/S transition in the mammalian cell cycle as a transcriptional factor (1). E2F1 is regulated during cell cycle progression. It is phosphorylated at Ser364 by Chk2 kinase in response to DNA damage, stabilized, mobilized to nucleus and activated as a transcription factor (2). It induces apoptosis by activating transcription of the p53 homolog, p73 (3). E2F1 protein consists of 437 amino acids with a molecular mass of 46 kDa.

Data Link UniProtKB/Swiss-Prot [Q01094](http://www.uniprot.org/entry/Q01094) (E2F1_HUMAN)

References

1. Trimarchi JM & Lees JA "Sibling rivalry in the E2F family" *Nat Rev Mol Cell Biol* **3**:11-20(2002) PMID: [11823794](https://pubmed.ncbi.nlm.nih.gov/11823794/)
2. Stevens C et al "Chk2 activates E2F-1 in response to DNA damage" *Nat Cell Biol* **5**:401-409 (2003) PMID: [12717439](https://pubmed.ncbi.nlm.nih.gov/12717439/)
3. Irwin M et al "Role for the p53 homologue p73 in E2F-1-induced apoptosis" *Nature* **407**:645-648 (2000) PMID: [11034215](https://pubmed.ncbi.nlm.nih.gov/11034215/)

Figure. Identification of E2F1 protein phosphorylated at p-Ser364 with monoclonal antibody (#2)

MCF cells were grown in the absence (lane 1) or in the presence of etoposide at 10 µM for 16 h (lanes 2 & 3). Crude lysates were prepared and analyzed by Western blotting (lane 3) with the antibody #2 or immunoprecipitated by pantropic anti-E2F1 antibody followed by Western blotting with the antibody #2.

