

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

Catalog # 71-151 100 µg

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.

Applications

1. Western blot ~1 µg/ml
2. ELISA

Not tested for other applications.

Specification

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

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

Isotype: IgG2b kappa

Form: Purified IgG 1 mg/ml in PBS(-), 50% glycerol

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

Storage: -20°C, for long term storage -70°C

Data Link: UniProtKB/Swiss-Prot [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](#)
2. Stevens C et al "Chk2 activates E2F-1 in response to DNA damage" *Nat Cell Bio* 5:401-409 (2003) PMID: [12717439](#)
3. Irwin M et al "Role for the p53 homologue p73 in E2F-1-induced apoptosis" *Nature* 407:645-648 (2000) PMID: [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 blot (lane 3) with the antibody #2 or immunoprecipitated by pantropic anti-E2F1 antibody followed by Western blot with the antibody #2.

