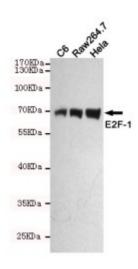


Anti-E2F-1 antibody



Description Mouse monoclonal to E2F-1.

Model STJ99250

Host Mouse

Reactivity Human, Rat **Applications** ELISA, WB

Immunogen Purified recombinant human E2F-1 protein fragments expressed in E.coli.

Gene ID <u>1869</u>

Dilution range

Gene Symbol <u>E2F1</u>

Specificity This antibody detects endogenous levels of E2F-1 and does not cross-react

WB 1:500-2000ELISA 1:10000-20000

with related proteins.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Clone ID 4G8-2C2-C12

Note For Research Use Only (RUO).

Protein Name Transcription factor E2F1 E2F-1 PBR3 Retinoblastoma-associated protein 1

RBAP-1 Retinoblastoma-binding protein 3 RBBP-3 pRB-binding protein

E2F-1

Molecular Weight 70kDa

Clonality Monoclonal

Conjugation Unconjugated

Isotype IgG2b

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:3113OMIM:189971</u>

Alternative Names Transcription factor E2F1 E2F-1 PBR3 Retinoblastoma-associated protein 1

RBAP-1 Retinoblastoma-binding protein 3 RBBP-3 pRB-binding protein

E2F-1

Function Transcription activator that binds DNA cooperatively with DP proteins

through the E2 recognition site, 5'-TTTC[CG]CGC-3' found in the promoter region of a number of genes whose products are involved in cell cycle regulation or in DNA replication. The DRTF1/E2F complex functions in the

control of cell-cycle progression from G1 to S phase. E2F1 binds

preferentially RB1 in a cell-cycle dependent manner. It can mediate both cell

proliferation and TP53/p53-dependent apoptosis. Blocks adipocyte

differentiation by binding to specific promoters repressing CEBPA binding to

its target gene promoters.

Cellular Localization Nucleus.

Post-translational Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase.

Modifications Phosphorylation at Ser-364 by CHEK2 stabilizes E2F1 upon DNA damage

and regulates its effect on transcription and apoptosis. Acetylation stimulates DNA-binding. Enhanced under stress conditions such as DNA damage and inhibited by retinoblastoma protein RB1. Regulated by KAP1/TRIM28 which

recruits HDAC1 to E2F1 resulting in deacetylation. Acetylated by

P/CAF/KAT2B.

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