

ARG62474
anti-E2F1 antibody [KH20]Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [KH20] recognizes E2F1
Tested Reactivity	Hu, Ms, Rat, Xenopus laevis
Tested Application	GSA, IHC, IP, WB
Specificity	The epitope recognized by the antibody resides in the N-terminal region of human E2F1 (amino acids 1-89).
Host	Mouse
Clonality	Monoclonal
Clone	KH20
Isotype	IgG2a
Target Name	E2F1
Species	Human
Immunogen	Recombinant human E2F1
Conjugation	Un-conjugated
Alternate Names	RBAP1; Retinoblastoma-associated protein 1; Retinoblastoma-binding protein 3; RBBP3; pRB-binding protein E2F-1; RBBP-3; E2F-1; Transcription factor E2F1; RBP3; PBR3; RBAP-1

Application Instructions

Application Note	WB: 1-2 µg/ml * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
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Properties

Form	Liquid
Buffer	0.01 M PBS (pH 7.4), 1% BSA and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Stabilizer	1% BSA
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	E2F1
Gene Full Name	E2F transcription factor 1
Background	The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family plays a crucial role in the control of cell cycle and action of tumor suppressor proteins and is also a target of the transforming proteins of small DNA tumor viruses. The E2F proteins contain several evolutionarily conserved domains found in most members of the family. These domains include a DNA binding domain, a dimerization domain which determines interaction with the differentiation regulated transcription factor proteins (DP), a transactivation domain enriched in acidic amino acids, and a tumor suppressor protein association domain which is embedded within the transactivation domain. This protein and another 2 members, E2F2 and E2F3, have an additional cyclin binding domain. This protein binds preferentially to retinoblastoma protein pRB in a cell-cycle dependent manner. It can mediate both cell proliferation and p53-dependent/independent apoptosis. [provided by RefSeq, Jul 2008]
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 (PubMed:20176812). [UniProt]
Research Area	Cancer antibody; Gene Regulation antibody
Calculated Mw	47 kDa
PTM	Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase. 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.