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# E2F1 Antibody (H357)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7593c

## Product Information

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|---|---|
| **Application** | WB, E |
| **Primary Accession** | Q01094 |
| **Reactivity** | Human |
| **Predicted** | Bovine, Canine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB7913 |
| **Calculated MW** | 46920 |
| **Antigen Region** | 342-371 |

## Additional Information

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|---|---|
| **Gene ID** | 1869 |
| **Other Names** | Transcription factor E2F1, E2F-1, PBR3, Retinoblastoma-associated protein 1, RBAP-1, Retinoblastoma-binding protein 3, RBBP-3, pRB-binding protein E2F-1, E2F1, RBBP3 |
| **Target/Specificity** | This E2F1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 342-371 amino acids from human E2F1. |
| **Dilution** | WB~~1:2000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | E2F1 Antibody (H357) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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|---|---|
| **Name** | E2F1 {ECO:0000303\|PubMed:8964493, ECO:0000312\|HGNC:HGNC:3113} |
| **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 (PubMed:10675335, PubMed:12717439, PubMed:17050006, PubMed:17704056, PubMed:18625225, PubMed:28992046). The DRTF1/E2F complex functions in the control of cell-cycle progression from G1 to S phase (PubMed:10675335, PubMed:12717439, PubMed:17704056). E2F1 binds preferentially RB1 in a cell-cycle dependent manner (PubMed:10675335, PubMed:12717439, PubMed:17704056). It can mediate both cell proliferation and TP53/p53-dependent apoptosis (PubMed:8170954). Blocks adipocyte differentiation by binding to specific promoters repressing CEBPA binding to its target gene promoters (PubMed:20176812). Directly activates transcription of PEG10 (PubMed:17050006, PubMed:18625225, PubMed:28992046). Positively regulates transcription of RRP1B (PubMed:20040599).

**Cellular Location** Nucleus

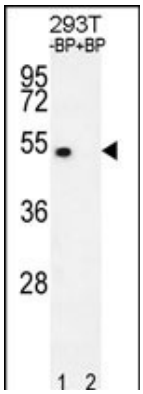
## Background

E2F1 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 evolutionally 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 two 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.

## References

O'Donnell, K.A., et al., Nature 435(7043):839-843 (2005). Wang, C., et al., J. Biol. Chem. 280(13):12339-12343 (2005). Joshi, B., et al., Oncogene 24(13):2204-2217 (2005). Saberwal, G., et al., Int. J. Hematol. 80(2):146-154 (2004). Chaussepied, M., et al., Mol. Cell 16(5):831-837 (2004).

## Images




Western blot analysis of E2F1 Antibody (H357) Pab (Cat.#AP7593c) pre-incubated without(lane 1) and with(lane 2) blocking peptide in 293T cell line lysate. E2F1 Antibody (H357) (arrow) was detected using the purified Pab.

## Citations

- Maspin genetically and functionally associates with gastric cancer by regulating cell cycle progression.
- Sj7170, a unique dual-function peptide with a specific α-chymotrypsin inhibitory activity and a potent tumor-activating effect from scorpion venom.

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