

**Anti-E2F1 Antibody**  
Catalog # ABO10878**Specification**

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**Anti-E2F1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q01094</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Transcription factor E2F1(E2F1) detection. Tested with WB in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-E2F1 Antibody - Additional Information**

**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

**Calculated MW**

46920 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Nucleus.

**Protein Name**

Transcription factor E2F1(E2F-1)

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human E2F1(246-260aa VTCQDLRSIADPAEQ), identical to the related mouse and rat sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

Storage

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

### Sequence Similarities

Belongs to the E2F/DP family.

## Anti-E2F1 Antibody - Protein Information

**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:<a href="http://www.uniprot.org/citations/10675335" target="\_blank">10675335</a>, PubMed:<a href="http://www.uniprot.org/citations/12717439" target="\_blank">12717439</a>, PubMed:<a href="http://www.uniprot.org/citations/17050006" target="\_blank">17050006</a>, PubMed:<a href="http://www.uniprot.org/citations/17704056" target="\_blank">17704056</a>, PubMed:<a href="http://www.uniprot.org/citations/18625225" target="\_blank">18625225</a>, PubMed:<a href="http://www.uniprot.org/citations/28992046" target="\_blank">28992046</a>). The DRTF1/E2F complex functions in the control of cell-cycle progression from G1 to S phase (PubMed:<a href="http://www.uniprot.org/citations/10675335" target="\_blank">10675335</a>, PubMed:<a href="http://www.uniprot.org/citations/12717439" target="\_blank">12717439</a>, PubMed:<a href="http://www.uniprot.org/citations/17704056" target="\_blank">17704056</a>). E2F1 binds preferentially RB1 in a cell-cycle dependent manner (PubMed:<a href="http://www.uniprot.org/citations/10675335" target="\_blank">10675335</a>, PubMed:<a href="http://www.uniprot.org/citations/12717439" target="\_blank">12717439</a>, PubMed:<a href="http://www.uniprot.org/citations/17704056" target="\_blank">17704056</a>). It can mediate both cell proliferation and TP53/p53- dependent apoptosis (PubMed:<a href="http://www.uniprot.org/citations/8170954" target="\_blank">8170954</a>). Blocks adipocyte differentiation by binding to specific promoters repressing CEBPA binding to its target gene promoters (PubMed:<a href="http://www.uniprot.org/citations/20176812" target="\_blank">20176812</a>). Directly activates transcription of PEG10 (PubMed:<a href="http://www.uniprot.org/citations/17050006" target="\_blank">17050006</a>, PubMed:<a href="http://www.uniprot.org/citations/18625225" target="\_blank">18625225</a>, PubMed:<a href="http://www.uniprot.org/citations/28992046" target="\_blank">28992046</a>). Positively regulates transcription of RRP1B (PubMed:<a href="http://www.uniprot.org/citations/20040599" target="\_blank">20040599</a>).

### Cellular Location

Nucleus

## Anti-E2F1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-E2F1 Antibody - Images



Anti-E2F1 antibody, ABO10878, Western blotting All lanes: Anti E2F1 (ABO10878) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: MCF-7 Whole Cell Lysate at 40ug Predicted bind size: 47KD Observed bind size: 60KD

### Anti-E2F1 Antibody - Background

Transcription factor E2F1 is a protein that in humans is encoded by the E2F1 gene. The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family of transcription factors appears to play a critical role in the transcription of certain genes required for cell cycle progression. E2F1, the first cloned member of this family, is regulated during the cell cycle at the mRNA level by changes in transcription of the E2F1 gene and at the protein level by complex formation with proteins such as the retinoblastoma gene product (pRB), cyclin A and DP1. E2F1 can override a pRB-induced G1/S block and can behave as an oncogene in certain cells. E2F1 was cloned and was found to contain seven exons. Fluorescence in situ hybridization localized E2F1 to chromosome 20q11. The E2F1 transcription factor can promote proliferation or apoptosis when activated, and is a key downstream target of the retinoblastoma tumour suppressor protein (pRB).