

Anti-E2F1 Antibody

Catalog # ABO10878

Specification

Anti-E2F1 Antibody - Product Information

ApplicationWBPrimary AccessionQ01094HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Transcription factor E2F1(E2F1) detection. Tested with WB inHuman.

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

Subcellular Localization Nucleus.

Protein Name Transcription factor E2F1(E2F-1)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

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: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

Anti-E2F1 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot



- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-E2F1 Antibody - Images



Anti-E2F1 antibody, ABO10878, Western blottingAll lanes: Anti E2F1 (ABO10878) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 47KDObserved 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).