

Phospho-E2F1(H357) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3698a

Specification

Phospho-E2F1(H357) Antibody - Product Information

Application DB,E
Primary Accession Q01094
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 46920

Phospho-E2F1(H357) 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

Target/Specificity

This E2F1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding H357 of human E2F1.

Dilution

DB~~1:500

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

Phospho-E2F1(H357) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-E2F1(H357) 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).

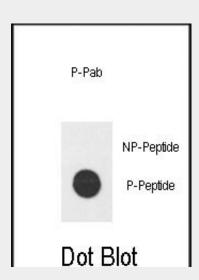
Cellular Location Nucleus

Phospho-E2F1(H357) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Phospho-E2F1(H357) Antibody - Images



Dot blot analysis of Phospho-hE2F1-H357 Pab (Cat. #AP3698a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-E2F1(H357) Antibody - 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 evolutionally conserved domains found in most members of the family. These domains





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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.

Phospho-E2F1(H357) Antibody - References

Pulikkan, J.A., et al. Blood 115(9):1768-1778(2010) Paik, J.C., et al. J. Biol. Chem. 285(9):6348-6363(2010) Alla, V., et al. J. Natl. Cancer Inst. 102(2):127-133(2010) Zhou, C., et al. Mol. Endocrinol. 23(12):2000-2012(2009) Yang, X., et al. Genes Dev. 23(20):2388-2393(2009) Olsen, J.V., et al. Cell 127(3):635-648(2006)