

Product datasheet

Anti-E2F1 antibody [1D12] ab288369

Recombinant

6 Images

Overview

Product name	Anti-E2F1 antibody [1D12]
Description	Rabbit monoclonal [1D12] to E2F1
Host species	Rabbit
Tested applications	Suitable for: ICC, WB, IHC-P, Flow Cyt
Species reactivity	Reacts with: Rat, Human
Immunogen	Synthetic peptide corresponding to Human E2F1. Database link: Q01094
Positive control	WB: Jurkat whole cell lysate, PC-3 whole cell lysate, Rat heart tissue. IHC: Human breast cancer, human tonsil tissue. ICC: HeLa cells. Flow Cyt: Rabbit IgG.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 0.87% Sodium chloride, 50% Glycerol (glycerin, glycerine), 48% PBS
Purity	Affinity purified
Clonality	Monoclonal
Clone number	1D12
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab288369 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC		1/20 - 1/200.
WB		1/500 - 1/5000. Predicted molecular weight: 47 kDa.
IHC-P		1/50 - 1/200.
Flow Cyt		1/20 - 1/200.

Target

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. E2F-1 binds preferentially RB1 protein, in a cell-cycle dependent manner. It can mediate both cell proliferation and p53-dependent apoptosis.

Sequence similarities

Belongs to the E2F/DP family.

Post-translational modifications

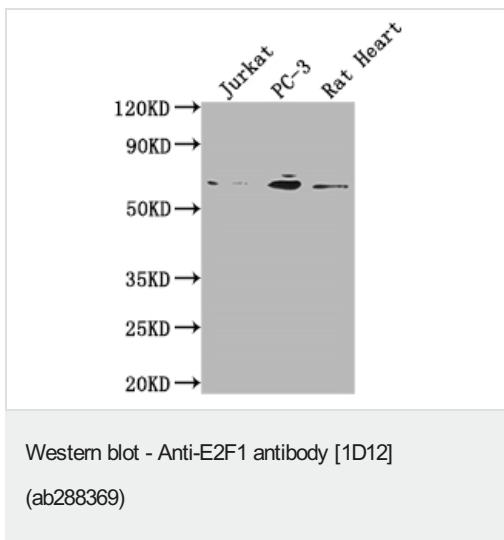
Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase.

Acetylation stimulates DNA-binding. Enhanced under stress conditions such as DNA damage and inhibited by retinoblastoma protein pRB. Regulated by KAP1/TRIM28 which recruits HDAC1 to E2F1 resulting in deacetylation. Acetylated by P/CAF/KAT2B.

Cellular localization

Nucleus.

Images



All lanes : Anti-E2F1 antibody [1D12] (ab288369) at 1/2000 dilution

Lane 1 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 2 : PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

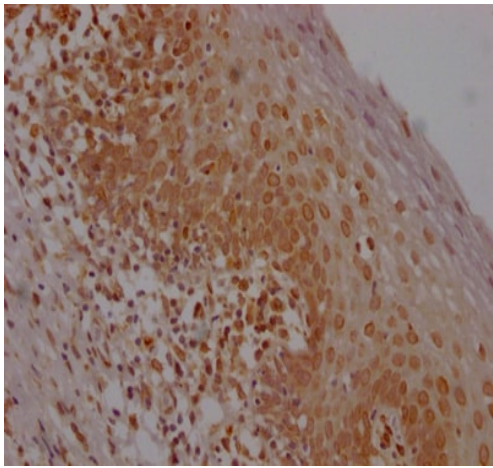
Lane 3 : Rat heart tissue

Secondary

All lanes : Goat polyclonal to rabbit IgG at 1/50000 dilution

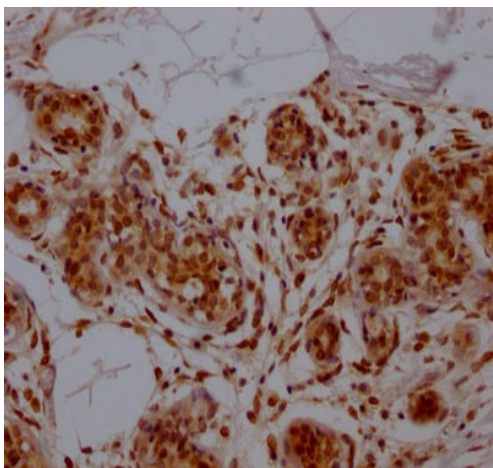
Predicted band size: 47 kDa

Observed band size: 60 kDa



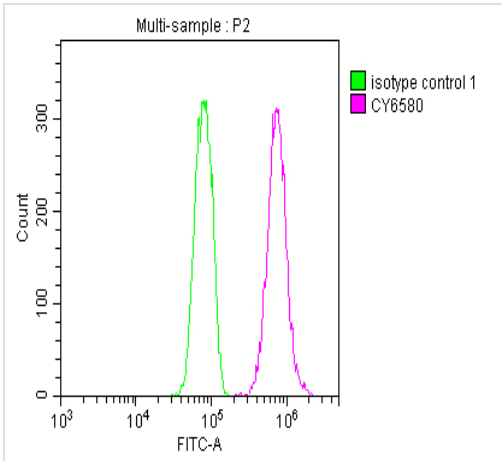
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-E2F1 antibody [1D12] (ab288369)

IHC image of ab288369 diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30 min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



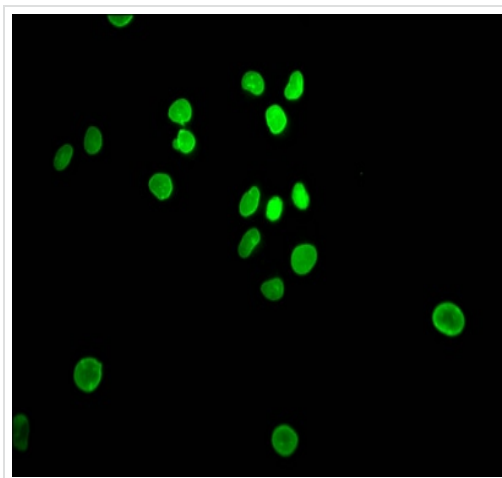
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-E2F1 antibody [1D12] (ab288369)

IHC image of ab288369 diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30 min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Flow Cytometry - Anti-E2F1 antibody [1D12]
(ab288369)

Overlay histogram showing HeLa cells stained with ab288369 (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody ($1\mu\text{g}/1 \times 10^6$ cells) for 1 h at 4°C . The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30 min at 4°C . Control antibody (green line) was Rabbit IgG ($1\mu\text{g}/1 \times 10^6$ cells) used under the same conditions. Acquisition of $>10,000$ events was performed.



Immunocytochemistry - Anti-E2F1 antibody [1D12]
(ab288369)

Immunofluorescence staining of HeLa cells with ab288369 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% Triton X-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C . Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-E2F1 antibody [1D12] (ab288369)

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