

## ARG59557 anti-E2F1 antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes E2F1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	E2F1
Species	Human
Immunogen	Synthetic peptide derived from Human E2F1.
Conjugation	Un-conjugated
Alternate Names	RBAP1; Retinoblastoma-associated protein 1; Retinoblastoma-binding protein 3; RBBP3; pRB-binding protein E2F-1; RBBP-3; E2F-1; Transcription factor E2F1; RBP3; PBR3; RBAP-1

### Application Instructions

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	

### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

#### Note

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Gene Symbol	E2F1
Gene Full Name	E2F transcription factor 1
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 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. [provided by RefSeq, Jul 2008]
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. E2F1 binds preferentially RB1 in a cell-cycle dependent manner. It can mediate both cell proliferation and TP53/p53-dependent apoptosis. Blocks adipocyte differentiation by binding to specific promoters repressing CEBPA binding to its target gene promoters. [UniProt]
Calculated Mw	47 kDa
PTM	Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase. Phosphorylation at Ser-364 by CHEK2 stabilizes E2F1 upon DNA damage and regulates its effect on transcription and apoptosis.  Acetylation stimulates DNA-binding. Enhanced under stress conditions such as DNA damage and inhibited by retinoblastoma protein RB1. Regulated by KAP1/TRIM28 which recruits HDAC1 to E2F1 resulting in deacetylation. Acetylated by P/CAF/KAT2B. [UniProt]
Cellular Localization	Nucleus. [UniProt]

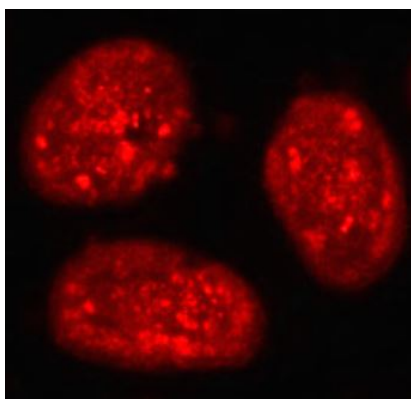
## Images



ARG59557 anti-E2F1 antibody WB image

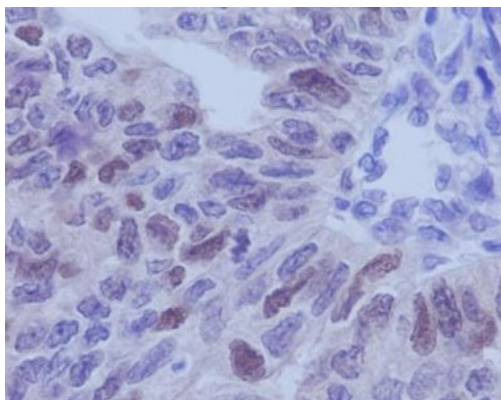
Western blot: MCF-7 stained with ARG59557 anti-E2F1 antibody.

From Chiglintseva D et al. Biomaterials. (2024), [doi: 10.1016/j.biomaterials.2024.122604](https://doi.org/10.1016/j.biomaterials.2024.122604), Fig. 6. D.



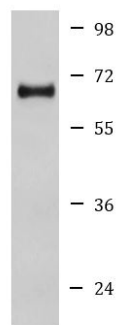
ARG59557 anti-E2F1 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG59557 anti-E2F1 antibody.



ARG59557 anti-E2F1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human ovary stained with ARG59557 anti-E2F1 antibody.



HeLa

ARG59557 anti-E2F1 antibody WB image

Western blot: HeLa cell lysate stained with ARG59557 anti-E2F1 antibody.