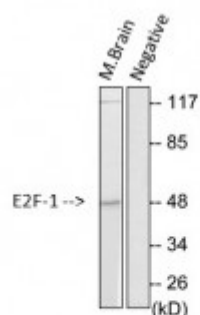


Anti-E2F-1 antibody



Western Blot (WB) analysis of Mouse brain cells using E2F-1 Polyclonal Antibody. (STJ98642)



Description

E2F-1 is a protein encoded by the E2F1 gene which is approximately 46,9 kDa. E2F-1 is localised to the nucleus. It is involved in glioma, cyclins and cell cycle regulation and activation of BH3-only proteins. It 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. E2F-1 is expressed in the skin, pancreas and the nervous system. Mutations in the E2F1 gene may result in retinoblastoma pharyngoconjunctival fever. STJ98642 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This antibody detects endogenous levels of E2F-1.

Model	STJ98642
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthetic peptide from AA range: 100-170.
Immunogen Region	100-170 aa
Gene ID	1869
Gene Symbol	E2F1
Dilution range	WB 1:5000-10000ELISA 1:10000
Specificity	The antibody detects endogenous E2F-1 protein
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.

Note	For Research Use Only (RUO).
Protein Name	Transcription factor E2F1 E2F-1 PBR3 Retinoblastoma-associated protein 1 RBAP-1 Retinoblastoma-binding protein 3 RBBP-3 pRB-binding protein E2F-1
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3113OMIM:189971
Alternative Names	Transcription factor E2F1 E2F-1 PBR3 Retinoblastoma-associated protein 1 RBAP-1 Retinoblastoma-binding protein 3 RBBP-3 pRB-binding protein E2F-1
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 .
Cellular Localization	Nucleus.
Post-translational Modifications	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.