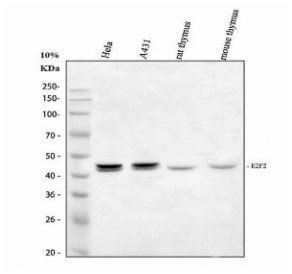
E2F2 Antibody / E2F Transcription Factor Antibody (R30908)

Catalog No.	Formulation	Size
R30908	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q14209
Applications	Western blot: 0.5-1ug/ml
Limitations	This E2F2 Antibody / E2F Transcription Factor Antibody is available for research use only.



E2F2 Antibody Human, Rat and Mouse WB. Western blot analysis of human HeLa (lane 1) and A431 (lane 2) whole cell lysates, rat thymus (lane 3), and mouse thymus (lane 4) using E2F2 Antibody / E2F Transcription Factor Antibody at 0.5 ug/ml. A specific band is detected at approximately 48 kDa in all samples, consistent with the predicted molecular weight of E2F2. This E2F2 Antibody, also called E2F Transcription Factor Antibody, is suitable for studies of cell cycle regulation, DNA replication, transcriptional control, and RB-E2F signaling.

Description

E2F2 Antibody / E2F Transcription Factor Antibody recognizes E2F2, a member of the E2F family of transcription factors that regulates genes required for cell cycle progression, DNA replication, and cellular proliferation. E2F2 functions primarily during the transition from the G1 to S phase of the cell cycle, where it activates the transcription of numerous genes involved in DNA synthesis, chromosome duplication, and cell division. Like other E2F family members, E2F2 forms heterodimers with DP proteins and interacts closely with retinoblastoma (RB) family proteins, which suppress E2F activity until cells receive appropriate proliferative signals. This regulatory network is fundamental to normal tissue growth and maintenance while preventing uncontrolled cell division.

E2F2 controls the expression of genes encoding DNA polymerases, cyclins, cyclin-dependent kinases, replication licensing factors, and DNA repair proteins. By coordinating these transcriptional programs, E2F2 ensures accurate DNA replication and orderly progression through the cell cycle. Beyond proliferation, E2F2 also contributes to apoptosis, differentiation, and cellular senescence depending on cell type and physiological context. The activity of E2F2 is tightly regulated by phosphorylation of RB proteins, growth factor signaling pathways, and feedback mechanisms that maintain appropriate levels of cell cycle gene expression.

E2F2 is expressed in proliferating tissues and plays particularly important roles in hematopoietic cells, lymphocyte development, and epithelial cell biology. Dysregulation of E2F2 signaling has been associated with numerous human cancers, where disruption of the RB-E2F pathway contributes to uncontrolled proliferation and tumor progression. In addition to oncology, E2F2 has been implicated in developmental biology, immune regulation, and tissue regeneration through its influence on stem and progenitor cell populations. Because E2F2 integrates mitogenic signaling with transcriptional control, it remains an important target for studies of cell cycle regulation and cancer biology.

An E2F2 Antibody is a valuable tool for investigating nuclear localization, transcriptional regulation, and cell cycle-dependent gene expression in cultured cells and tissue specimens. Researchers frequently use E2F Transcription Factor Antibody reagents to study DNA replication, RB pathway signaling, cellular proliferation, hematopoiesis, and cancer-associated transcriptional networks.

Explore our Transcription Factor Antibodies page for additional proteins involved in gene regulation, cell cycle control, and RNA polymerase II-mediated transcription.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the E2F2 Antibody / E2F Transcription Factor Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human E2F transcription factor 2 (ISDLFDSYDLGDLLIN) was used as the immunogen for this E2F2 antibody (100% mouse homology).

Storage

After reconstitution, the E2F2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

E2F2 Antibody, E2F Transcription Factor 2 Antibody, E2F Transcription Factor Antibody

Copyright © NSJ Bioreagents. All rights reserved.