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E2F4 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant E2F4.
Catalog # AT1836a

Product Information

Application	WB, E
Primary Accession	Q16254
Other Accession	NM_001950
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	5B7
Calculated MW	43960

Additional Information

Gene ID	1874
Other Names	Transcription factor E2F4, E2F-4, E2F4
Target/Specificity	E2F4 (NP_001941, 211 a.a. ~ 301 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	E2F4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

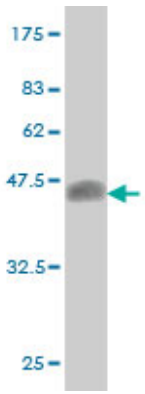
Background

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 binds to all three of the tumor suppressor proteins pRB, p107 and p130, but with higher affinity to the last two. It plays an important role in the suppression of proliferation-associated genes, and its gene mutation and increased expression may be associated with human cancer.

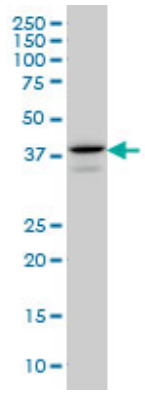
References

E2F4 is required for cardiomyocyte proliferation. van Amerongen MJ, et al. Cardiovasc Res, 2010 Apr 1. PMID 19955219.Cell cycle genes and ovarian cancer susceptibility: a tagSNP analysis. Cunningham JM, et al. Br J Cancer, 2009 Oct 20. PMID 19738611.E2F4 expression is required for cell cycle progression of normal intestinal crypt cells and colorectal cancer cells. Garneau H, et al. J Cell Physiol, 2009 Nov. PMID 19562678.Identification of genes associated with non-small-cell lung cancer promotion and progression. Bankovic J, et al. Lung Cancer, 2010 Feb. PMID 19473719.Multiple genetic variants along candidate pathways influence plasma high-density lipoprotein cholesterol concentrations. Lu Y, et al. J Lipid Res, 2008 Dec. PMID 18660489.

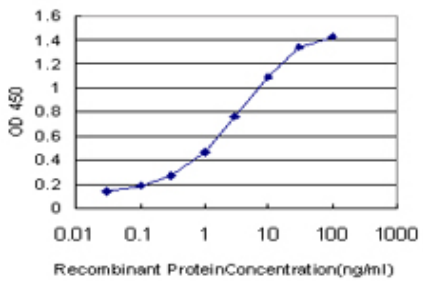
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.01 KDa) .



E2F4 monoclonal antibody (M01), clone 5B7 Western Blot analysis of E2F4 expression in A-549 ((Cat # AT1836a)



Detection limit for recombinant GST tagged E2F4 is approximately 0.03ng/ml as a capture antibody.