

#### Goat Anti-E2F7 Antibody

Peptide-affinity purified goat antibody Catalog # AF1350a

## **Specification**

# **Goat Anti-E2F7 Antibody - Product Information**

Application WB
Primary Accession Q96AV8

Other Accession NP 976328, 144455

Reactivity
Predicted
Pig, Dog
Host
Clonality
Polyclonal
Concentration
Concentration
Pig, Dog
Goat
Contentration
Concentration
Co

Isotype IgG
Calculated MW 99888

## **Goat Anti-E2F7 Antibody - Additional Information**

#### **Gene ID 144455**

#### **Other Names**

Transcription factor E2F7, E2F-7, E2F7

#### Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

Goat Anti-E2F7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Goat Anti-E2F7 Antibody - Protein Information**

#### Name E2F7

### **Function**

Atypical E2F transcription factor that participates in various processes such as angiogenesis, polyploidization of specialized cells and DNA damage response. Mainly acts as a transcription repressor that binds DNA independently of DP proteins and specifically recognizes the E2 recognition site 5'-TTTC[CG]CGC-3'. Directly represses transcription of classical E2F transcription factors such as E2F1. Acts as a regulator of S-phase by recognizing and binding the E2-related site 5'-TTCCCGCC-3' and mediating repression of G1/S-regulated genes. Plays a key role in



polyploidization of cells in placenta and liver by regulating the endocycle, probably by repressing genes promoting cytokinesis and antagonizing action of classical E2F proteins (E2F1, E2F2 and/or E2F3). Required for placental development by promoting polyploidization of trophoblast giant cells. Also involved in DNA damage response: up-regulated by p53/TP53 following genotoxic stress and acts as a downstream effector of p53/TP53-dependent repression by mediating repression of indirect p53/TP53 target genes involved in DNA replication. Acts as a promoter of sprouting angiogenesis, possibly by acting as a transcription activator: associates with HIF1A, recognizes and binds the VEGFA promoter, which is different from canonical E2 recognition site, and activates expression of the VEGFA gene. Acts as a negative regulator of keratinocyte differentiation.

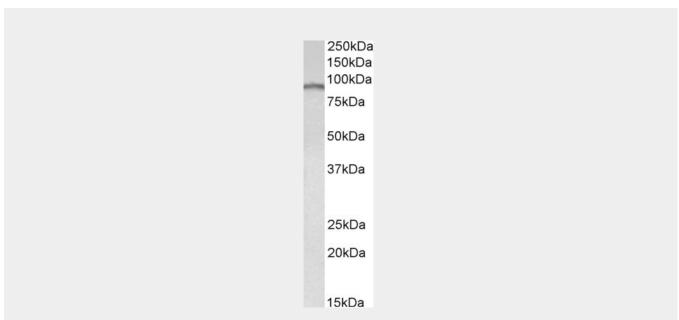
**Cellular Location** Nucleus.

# Goat Anti-E2F7 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Goat Anti-E2F7 Antibody - Images



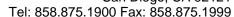
AF1350a (0.3  $\mu$ g/ml) staining of Human Cerebellum lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# Goat Anti-E2F7 Antibody - Background

E2F transcription factors, such as E2F7, play an essential role in the regulation of cell cycle progression (Di Stefano et al., 2003 [PubMed 14633988]).

#### Goat Anti-E2F7 Antibody - References







Genome-wide and candidate gene association study of cigarette smoking behaviors. Caporaso N, et al. PLoS One, 2009. PMID 19247474.

Coeliac disease-associated risk variants in TNFAIP3 and REL implicate altered NF-kappaB signalling. Trynka G, et al. Gut, 2009 Aug. PMID 19240061.

E2F7 can regulate proliferation, differentiation, and apoptotic responses in human keratinocytes: implications for cutaneous squamous cell carcinoma formation. Endo-Munoz L, et al. Cancer Res, 2009 Mar 1. PMID 19223542.

DNA-damage response control of E2F7 and E2F8. Zalmas LP, et al. EMBO Rep, 2008 Mar. PMID 18202719.

Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.