

### Goat Anti-ELF3 / ERT/ ESX Antibody

Peptide-affinity purified goat antibody Catalog # AF1361a

## **Specification**

## Goat Anti-ELF3 / ERT/ ESX Antibody - Product Information

Application WB
Primary Accession P78545

Other Accession NP\_004424, 1999

Reactivity
Host
Clonality
Concentration
Isotype
Human
Goat
Polyclonal
100ug/200ul

Isotype IgG
Calculated MW 41454

# Goat Anti-ELF3 / ERT/ ESX Antibody - Additional Information

#### **Gene ID 1999**

### **Other Names**

ETS-related transcription factor Elf-3, E74-like factor 3, Epithelial-restricted with serine box, Epithelium-restricted Ets protein ESX, Epithelium-specific Ets transcription factor 1, ESE-1, ELF3 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=3318" target="blank">HGNC:3318</a>)

#### 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-ELF3 / ERT/ ESX Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-ELF3 / ERT/ ESX Antibody - Protein Information

### Name ELF3 (HGNC:3318)

#### **Function**

Transcriptional activator that binds and transactivates ETS sequences containing the consensus nucleotide core sequence GGA[AT]. Acts synergistically with POU2F3 to transactivate the SPRR2A promoter and with RUNX1 to transactivate the ANGPT1 promoter. Also transactivates collagenase, CCL20, CLND7, FLG, KRT8, NOS2, PTGS2, SPRR2B, TGFBR2 and TGM3 promoters. Represses KRT4



promoter activity. Involved in mediating vascular inflammation. May play an important role in epithelial cell differentiation and tumorigenesis. May be a critical downstream effector of the ERBB2 signaling pathway. May be associated with mammary gland development and involution. Plays an important role in the regulation of transcription with TATA-less promoters in preimplantation embryos, which is essential in preimplantation development (By similarity).

# **Cellular Location**

Cytoplasm. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00237, ECO:0000269|PubMed:10391676, ECO:0000269|PubMed:15169914, ECO:0000269|PubMed:17060315} Note=Localizes to the cytoplasm where it has been shown to transform MCF-12A mammary epithelial cells via a novel cytoplasmic mechanism Also transiently expressed and localized to the nucleus where it induces apoptosis in non-transformed breast epithelial cells MCF-10A and MCF-12A via a transcription-dependent mechanism

#### **Tissue Location**

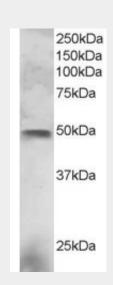
Expressed exclusively in tissues containing a high content of terminally differentiated epithelial cells including mammary gland, colon, trachea, kidney, prostate, uterus, stomach and skin

## Goat Anti-ELF3 / ERT/ ESX Antibody - Protocols

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

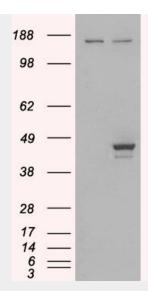
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Goat Anti-ELF3 / ERT/ ESX Antibody - Images



AF1361a staining (3  $\mu$ g/ml) of NCI-H460 lysate (RIPA buffer, 30  $\mu$ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.





HEK293 overexpressing ELF3 (RC200631) and probed with AF1361a (mock transfection in first lane), tested by Origene.

# Goat Anti-ELF3 / ERT/ ESX Antibody - References

ESE-1/EGR-1 pathway plays a role in tolfenamic acid-induced apoptosis in colorectal cancer cells. Lee SH, et al. Mol Cancer Ther, 2008 Dec. PMID 19074849.

Regulation of epithelium-specific Ets-like factors ESE-1 and ESE-3 in airway epithelial cells: potential roles in airway inflammation. Wu J, et al. Cell Res, 2008 Jun. PMID 18475289.

ESE-1 inhibits the invasion of oral squamous cell carcinoma in conjunction with MMP-9 suppression. Iwai S, et al. Oral Dis, 2008 Mar. PMID 18302674.

ESE-1 is a potent repressor of type II collagen gene (COL2A1) transcription in human chondrocytes. Peng H, et al. | Cell Physiol, 2008 May. PMID 18044710.

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.