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ETV5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10733a

Product Information

Application	FC, WB, E
Primary Accession	P41161
Other Accession	NP_004445.1
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57838
Antigen Region	8-36

Additional Information

Gene ID	2119
Other Names	ETS translocation variant 5, Ets-related protein ERM, ETV5, ERM
Target/Specificity	This ETV5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 8-36 amino acids from the N-terminal region of human ETV5.
Dilution	FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ETV5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ETV5
Synonyms	ERM
Function	Binds to DNA sequences containing the consensus nucleotide core sequence 5'-GGAA.-3'.

Cellular Location	Nucleus.
Tissue Location	Ubiquitous.

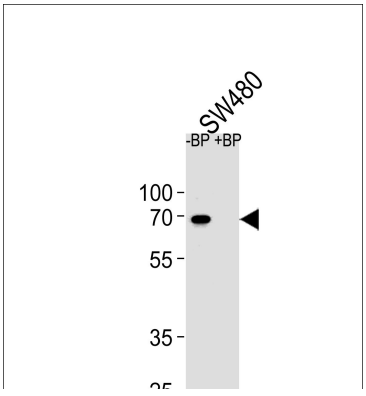
Background

The ETS family of transcription factors, characterized by an evolutionarily conserved DNA-binding domain, regulates expression of more than 300 target genes by binding to a purine-rich GGAA/T core sequence. Depending on the cellular context, they can function as transactivators or transrepressors. Ets proteins have been implicated in regulation of gene expression during a variety of biological processes, including growth control, transformation, T-cell activation, and developmental programs in many organisms. Signals regulating cell growth are transmitted from outside the cell to the nucleus by growth factors and their receptors, G-proteins, kinases and transcription factors. It was shown that ETS signal transduction is implicated in hematopoiesis and angiogenesis at the earliest stages of embryogenesis, and is later involved in tissue development. Deregulated expression and/or formation of chimeric fusion proteins of the ETS family due to proviral insertion or chromosome translocation is associated with leukemias and with specific types of solid tumors.1 Among the multiple Ets proteins, the PEA3 group consists of ETV1 (Ets variant gene 1; also called ER81), ETV4 (also called PEA3) and ETV5 (also called ERM). All three members are 95% identical in the ETS domain and more than 85% in the acidic transactivation domain. Several studies suggest that the PEA3 group proteins are involved in intestinal tumors, gastric cancer, and breast cancer metastasis. In nearly all Ewing?s sarcoma tumors, EWS, which encodes a RNA-binding protein, is fused by chromosomal translocation to an Ets gene, including FLI, ERG, ETV4, and ETV1. This results in the expression of chimeric proteins that may be important in tumor cell transformation.2 Recently, it was reported that TMPRSS2, an AR-regulated gene, is fused by translocation to the ETV1, ERG, or ETV4 gene in a subset of prostate cancers. These findings suggest an important role for PEA3 proteins in prostate cancer.3 In addition Ets family members have been correlated to tumor progression by upregulating the expression of matrix-degrading proteases. The acquisition of a migratory phenotype by the epithelial tumor cells together with the remodeling of the extracellular matrix must accompany the process of cancer cell invasion. Indeed, ETV5 has been shown to act through matrix metalloproteinase-2 gelatinolytic activity to confer invasive capabilities, associated with an initial switch to myometrial infiltration.4

References

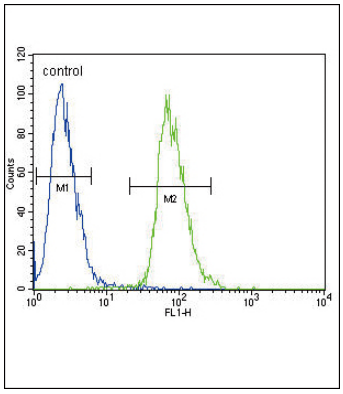
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Images



Western blot analysis of ETV5 Antibody (N-term) Pab (Cat. #AP10733a) pre-incubated without(lane 1) and with(lane 2) blocking peptide in SW480 cell line lysate. ETV5 Antibody (N-term) (arrow) was detected using the purified Pab.

ETV5 Antibody (N-term) (Cat. #AP10733a) flow cytometric analysis of 293 cells (right histogram) compared to a



negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.