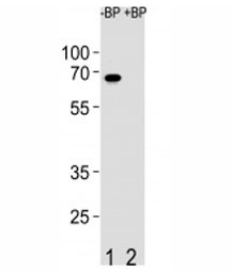
ETV5 Antibody (F40893)

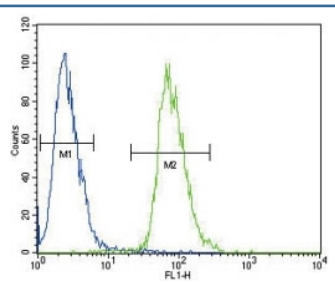
Catalog No.	Formulation	Size
F40893-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40893-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P41161
Applications	Western Blot : 1:1000 Flow Cytometry : 1:10-1:50
Limitations	This ETV5 antibody is available for research use only.



Western blot analysis of ETV5 antibody pre-incubated without (Lane 1) and with (2) blocking peptide in SW480 lysate



ETV5 antibody flow cytometric analysis of 293 cells (green) compared to a negative control (blue). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.

Description

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

Application Notes

Titration of the ETV5 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 8-36 from the human protein was used as the immunogen for this ETV5 antibody.

Storage

Aliquot the ETV5 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.