

For Research Use Only

# ELF1 Polyclonal antibody, PBS Only

Catalog Number:22565-1-PBS



## Basic Information

**Catalog Number:**

22565-1-PBS

**Size:**

100ug , Concentration: 1 mg/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG14689

**GenBank Accession Number:**

BC030507

**GeneID (NCBI):**

1997

**UNIPROT ID:**

P32519

**Full Name:**

E74-like factor 1 (ets domain transcription factor)

**Calculated MW:**

619 aa, 67 kDa

**Observed MW:**

97 kDa

**Purification Method:**

Antigen affinity purification

## Applications

**Tested Applications:**

WB, IHC, IF/ICC, IP, Indirect ELISA

**Species Specificity:**

human, mouse

## Background Information

ELF1, also named as ETS-related transcription factor Elf-1, is originally cloned from a human T-cell cDNA library by hybridization with a probe encoding the DNA binding domain (ETS domain) of the human Ets-1 cDNA. Based on its preferential expression in embryonic lymphoid organs (thymus and spleen), a wide variety of epithelial cells and fetal liver as well as in adult haematopoietic tissues, including thymus, spleen and bone marrow, Elf-1 emerged as a potential key regulator of haematopoietic gene expression. Consistent with this notion, Elf-1 has been shown to be a direct upstream regulator of genes important for haematopoiesis such as Scl, Fli-1, Lyl-1, Runx1 and Lmo2. Elf-1 has also been shown to be important for blood vessel development, a process that is closely linked to early haematopoiesis during embryonic development. Elf-1 has been reported to take part in the transcriptional control of major regulators of blood vessel development such as Tie1, Tie2, angiopoietin-2, the vascular endothelial growth factor receptor 1 (VEGFR1), the endothelial nitric-oxide synthase (eNOS) and endoglin. Functional activity of Ets proteins is modulated at multiple levels. It is known that ELF-1 appears in the cytoplasm as a 80 kDa protein that is O-glycosylated and phosphorylated in order to be translocated into the nucleus where it can be detected as a 98 kDa protein. After dephosphorylation, the protein is degraded through the proteasome pathway. The inactive form of Elf-1 is an 80-kDa protein that lacks DNA-binding activity and is confined to the cytoplasm of the cell. Phosphorylation and O-linked glycosylation increase the molecular weight of Elf-1 to 98 kDa, the active form; 98 kDa Elf-1 binds to the promoter of the gene that codes for CD3 $\zeta$  inducing its transcription.

## Storage

**Storage:**

Store at -80°C.

**Storage Buffer:**

PBS only, pH7.3

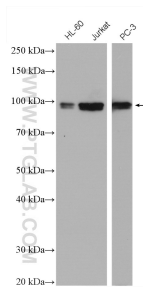
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

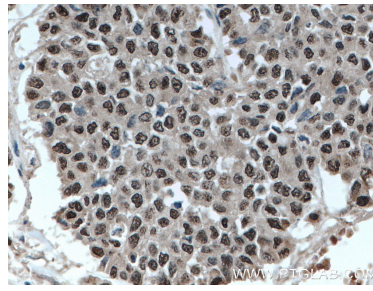
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

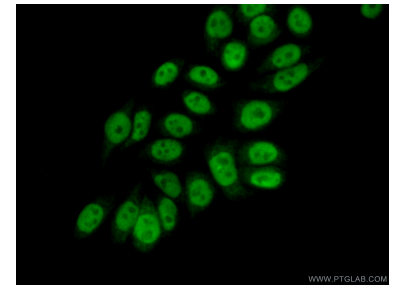
## Selected Validation Data



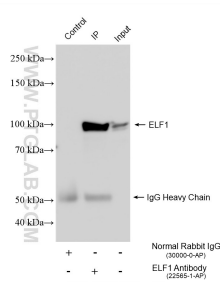
Various lysates were subjected to SDS PAGE followed by western blot with 22565-1-AP (ELF1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 22565-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 22565-1-AP (ELF1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 22565-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (10% Formaldehyde) fixed PC-3 cells using 22565-1-AP (ELF1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 22565-1-PBS in a different storage buffer formulation.



IP result of anti-ELF1 (IP:22565-1-AP, 4ug; Detection:22565-1-AP 1:5000) with THP-1 cells lysate 1800 ug. This data was developed using the same antibody clone with 22565-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 22565-1-AP (ELF1 antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 22565-1-PBS in a different storage buffer formulation.