For Research Use Only

ELF1 Polyclonal antibody

Catalog Number:55029-1-AP

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Basic Information

Catalog Number:
55029-1-AP

Size:
150ul , Concentration: 800 ug/ml by Nanodrop and 460 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_172373

GeneID (NCBI):
1997

UNIPROT ID:
P32519

Full Name:
E74-like factor 1 (ets domain transcription factor)

Calculated MW:
67 kDa

Observed MW:
70-95 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:200-1:1000

Applications

Tested Applications:
WB, ELISA

Species Specificity:
human

Positive Controls:

WB : A431 cells, Jurkat cells, K-562 cells, U-937 cells

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 CD3ζ inducing its transcription.

Storage

Storage:
Store at -20°C.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

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
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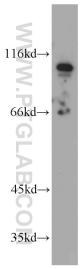
Selected Validation Data



A431 cells were subjected to SDS PAGE followed by western blot with 55029-1-AP (ELF1 antibody) at dilution of 1:100 incubated at room temperature for 1.5 hours.