For Research Use Only

ELF1 Monoclonal antibody, PBS Only

Catalog Number: 67138-1-PBS



Purification Method:

Protein A purification

CloneNo.:

2D4A11

Basic Information

Catalog Number: 67138-1-PBS

GenBank Accession Number:

BC030507

GeneID (NCBI):

100ug, Concentration: 1 mg/ml by

UNIPROT ID: P32519

Mouse Isotype:

Nanodrop:

Full Name: E74-like factor 1 (ets domain

lgG1

transcription factor)

Immunogen Catalog Number: AG14689

Calculated MW: 619 aa. 67 kDa

Observed MW:

93-97 kDa

Applications

Tested Applications:

WB, Indirect ELISA

Species Specificity:

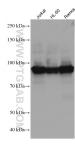
Background Information

ELF 1, 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 -80°C. Storage Buffer: PBS Only

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67138-1-lg (ELF1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67138-1-PBS in a different storage buffer formulation.