

For Research Use Only

ELF1 Monoclonal antibody

Catalog Number: 67138-1-Ig



Basic Information

Catalog Number: 67138-1-Ig	GenBank Accession Number: BC030507	Purification Method: Protein A purification
Size: 150ul, Concentration: 2100 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 1997	CloneNo.: 2D4A11
Source: Mouse	Full Name: E74-like factor 1 (ets domain transcription factor)	Recommended Dilutions: WB 1:1000-1:6000
Isotype: IgG1	Calculated MW: 619 aa, 67 kDa	
Immunogen Catalog Number: AG14689	Observed MW: 93-97 kDa	

Applications

Tested Applications:

WB, ELISA

Species Specificity:

Human

Positive Controls:

WB : Jurkat cells, A431 cells, PC-3 cells, HL-60 cells, Ramos 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. Stable for one year after shipment.

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

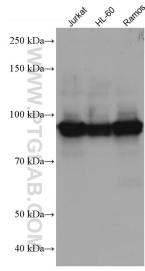
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67138-1-Ig (ELF1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.