

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                               |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human ETV6 in direct ELISAs and Western blots.                              |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                           |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human ETV6<br>Ser2-Asp111<br>Accession # P41212 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm     |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                        |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                     |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

ETV6 (ETS Translocation Variant 6; also TEL [Translocated ETS Leukemia]) is a 58-62 kDa member of the ETS (E-Twenty Six avian leukemia virus) family of proteins. It belongs to a particular class of repressors that are controlled by cell-cycle dependent signals. ETV6 is ubiquitously expressed, and acts as a sequence-specific transcriptional repressor of ETS-binding site-containing gene promoters. It likely does this by recruiting histone deacetylase to its binding site. It is also involved in steroid signaling, and is reported to bind to the DNA binding domains of both RAR and RXR. ETV6 appears to be important in coordinating bone marrow-mediated hematopoiesis. Genes known to be responsive to ETV6 regulation include FLI1, IDI and MMP-3. Human ETV6 is 452 amino acids (aa) in length. It contains one PNT (pointed)/B domain that mediates oligomerization (aa 40-124) followed by an ETS domain that binds DNA (aa 338-422). There are five known utilized Thr/Ser phosphorylation sites plus at least one alternative start site at Met43. This short form is very effective at gene repression due to the absence of a SUMOylation site at Lys11 that, when occupied, blocks DNA binding. Although ETV6 activity is dependent upon homooligomerization, it is also known to bind to TEL2 and FLI1. ETS genes are often involved in chromosomal translocations. ETV6 itself is associated with multiple rearrangements, including the genes encoding AML1, PDGFRβ and BTL (Brx-like Translocated in Leukemia). The translocated sequences of ETV6 differ from chimera to chimera. For example, aa 1-336 are fused to a portion of AML1, aa 1-154 are fused to a portion of PDGFRβ, and aa 12-433 are fused to a portion of BTL. Over aa 2-111, human ETV6 shares 91% aa sequence identity with mouse ETV6.

## PRODUCT SPECIFIC NOTICES

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