

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                          |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human ATBF1/ZFHX3 in direct ELISAs.                                                    |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                           |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                      |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human ATBF1/ZFHX3<br>His3608-Leu3703<br>Accession # Q15911 |
| <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.

**Immunocytochemistry** 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

ATBF1 (Adenine-Thymine motif Binding Factor 1; also ZFHX3) is a 400 kDa highly modular protein that contains motifs found in multiple transcription factor families. It is expressed by a variety of cells, both normal and malignant, including postmitotic neurons, hepatocytes, mammary epithelium and gastric carcinoma cells. ATBF1 is both cytoplasmic and nuclear, and its localization has pronounced effects on the cell cycle. Cytoplasmic ATBF1 is associated with cell proliferation, while nuclear ATBF1 appears to promote cell differentiation. Human ATBF1-A is 3703 amino acids (aa) in length. It contains seventeen consecutive C2H2-type Zn finger domains interspersed with short poly-Glu and poly-Ala segments (aa 282-2006), followed by two homeobox domains (aa 2146-2301), two additional C2H2 Zn finger domains (aa 2328-2552) and two homeobox plus three intermixed Zn finger domains. There are at least six utilized Ser phosphorylation sites. Two isoform variants have been reported. The first is termed ATBF1-B. It has a predicted MW of 306 kDa and appears following the use of an alternative start site at Met915. When the 914 aa N-terminus is present (as in ATBF1-A), ATBF1 shows transcriptional repression; when it is absent (as in ATBF1-B), ATBF1 acts as a transcriptional activator. The second isoform variant contains a 41 aa substitution for aa 1150-3703. Over aa 3608-3703, human ATBF1 shares 98% aa sequence identity with mouse ATBF1.

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