

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ATBF1/ZFH3 in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human ATBF1/ZFH3 His3608-Leu3703 Accession # Q15911
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

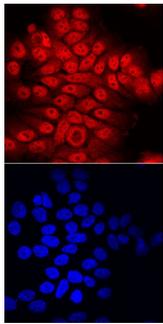
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunocytochemistry	5-15 µg/mL	See Below

DATA

Immunocytochemistry



ATBF1/ZFH3 in MCF-7 Human Cell Line. ATBF1/ZFH3 was detected in immersion fixed MCF-7 human breast cancer cell line using Sheep Anti-Human ATBF1/ZFH3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7384) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red, upper panel; Catalog # NL010) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

ATBF1 (Adenine-Thymine motif Binding Factor 1; also ZFH3) 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.