For Research Use Only

## CoraLite®594-conjugated ATF6 Monoclonal antibody



Catalog Number: CL594-66563

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL594-66563 BC014969 GeneID (NCBI): Size: 1000 µg/ml 22926 **UNIPROT ID:** Source: Mouse P18850

Isotype: Full Name: lgG1 activating transcription factor 6

Calculated MW: Immunogen Catalog Number:

AG21456

75 kDa Observed MW: 90-100 kDa

**Purification Method:** 

Protein G purification CloneNo.:

3B7E4 Recommended Dilutions:

IF 1:50-1:500

Excitation/Emission maxima wavelengths:

588 nm / 604 nm

**Applications** 

**Tested Applications:** 

IF/ICC

Species Specificity: Human, mouse, rat

Positive Controls:

IF: HepG2 cells,

## **Background Information**

Activating transcription factor 6 (ATF6) is a transcription factor that acts during endoplasmic reticulum stress by activating unfolded protein response target genes. Binds DNA on the 5'-CCAC[GA]-3'half of the ER stress response element (ERSE) (5'-CCAAT-N(9)-CCAC[GA]-3') and of ERSE II (5'-ATTGG-N-CCACG-3'). Binding to ERSE requires binding of NF-Y to ERSE. Could also be involved in activation of transcription by the serum response factor. During unfolded protein response an approximative 50 kDa fragment containing the cytoplasmic transcription factor domain is released by proteolysis. The cleavage seems to be performed sequentially by site-1 and site-2 proteases. The fully glycosylated form of ATF6, a 670 amino acid protein, exhibits an electrophoretic mobility of ~90 kDa in denaturing SDS-gels, in part because of the glycosylated modifications. ATF6 has 3 consensus sites for N-linked  $gly cosylation\ and\ exists\ constitutively\ as\ a\ gly cosylated\ protein.\ Differentially\ gly cosylated\ ATF6\ forms\ may\ result$ from mutations or experimental treatment (PMID:15804611) (PMID:14699159). The antibody recognizes cleaved and fully glycosylated forms of ATF6.

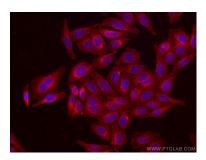
Storage

Store at -20°C. Avoid exposure to light.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite®594 ATF6 antibody (CL594-66563, Clone: 3B7E4) at dilution of 1:100.