For Research Use Only

## CoraLite®594-conjugated ATF6 Monoclonal antibody

Catalog Number:CL594-66563 Featured Product



**Basic Information** 

Catalog Number: GenBank Accession Number:

CL594-66563 BC014969
Size: GeneID (NCBI):

100ul , Concentration: 1000 ug/ml by 22926 Nanodrop; UNIPROT ID:

Source: P18850
Mouse Full Name:

Isotype: activating transcription factor 6

IgG1 Calculated MW:

Immunogen Catalog Number: 75 kDa
AG21456 Observed M

G21456 Observed MW:

90-100 kDa

Purification Method:

Protein G purification

CloneNo.: 3B7E4

Recommended Dilutions:

IF/ICC 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/ICC: HeLa cells, 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 glycosylation and exists constitutively as a glycosylated protein. Differentially glycosylated ATF6 forms may result from mutations or experimental treatment (PMID:15804611) (PMID:14699159). The antibody recognizes cleaved and fully glycosylated forms of ATF6.

Storage

Storage:

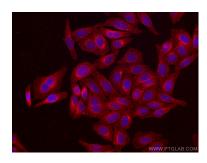
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

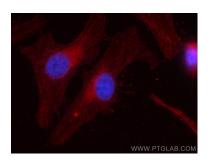
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

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.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite®594 ATF6 antibody (CL594-66563, Clone: 3B7E4) at dilution of 1:200.