For Research Use Only

CoraLite® Plus 488-conjugated ATF6 Monoclonal antibody



Catalog Number:CL488-66563 Featured Product

Basic Information

Catalog Number: GenBank Accession Number:

 CL488-66563
 BC014969

 Size:
 GeneID (NCBI):

 1000 ug/ml
 22926

 Source:
 UNIPROT ID:

 Mouse
 P18850

Isotype: Full Name:
IgG1 activating transcription factor 6

Immunogen Catalog Number: Calculated MW:

AG21456 75 kDa

Observed MW: 90-100 kDa Purification Method:

Protein G purification

CloneNo.: 3B7E4

Recommended Dilutions: IF/ICC 1:50-1:500

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

IF/ICC

Species Specificity: human, mouse, rat

Positive Controls:

IF/ICC: 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

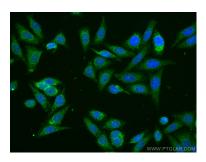
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

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® Plus 488 ATF6 antibody (CL488-66563, Clone: 3B7E4) at dilution of 1:100.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite® Plus 488 ATF6 antibody (CL488-66563, Clone: 3B7E4) at dilution of 1:200, CL594-Phalloidin (red).