For Research Use Only

CoraLite® Plus 488-conjugated ATF6 Monoclonal antibody

Catalog Number:

CL488-66563



Catalog Number: CL488-66563 Featured Product

Basic Information

GenBank Accession Number:

BC014969

GeneID (NCBI): 100ul , Concentration: 1000 ug/ml by 22926

Nanodrop: **UNIPROT ID:** P18850

Mouse Full Name:

Isotype: activating transcription factor 6

lgG1 Calculated MW:

Immunogen Catalog Number: 75 kDa AG21456

Observed MW:

90-100 kDa

wavelengths: 493 nm / 522 nm

CloneNo.:

3B7E4

Purification Method:

Protein G purification

Recommended Dilutions:

Excitation/Emission maxima

IF/ICC 1:50-1:500

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 $gly cosylation\ and\ exists\ constitutively\ as\ a\ gly cosylated\ protein.\ Differentially\ gly cosylated\ ATF6\ forms\ may\ result$ from mutations or experimental treatment (PMID:15804611) (PMID:14699159). The antibody recognizes cleaved and fully glycosylated forms of ATF6.

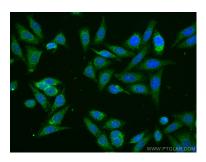
Storage

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

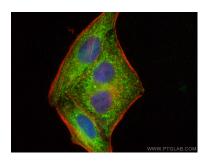
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

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).