

For Research Use Only

CoraLite® Plus 488-conjugated XBP1S/XBP1U Polyclonal antibody



Catalog Number: CL488-24168

Featured Product

Basic Information

Catalog Number: CL488-24168	GenBank Accession Number: BC000938	Purification Method: Antigen affinity purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 7494	Excitation/Emission maxima wavelengths: 493 nm / 522 nm
Source: Rabbit	Full Name: X-box binding protein 1	
Isotype: IgG	Calculated MW: 261 aa, 29 kDa	
Immunogen Catalog Number: AG21454	Observed MW: ~32 kDa; ~60 kDa	

Applications

Tested Applications:
FC (Intra)

Species Specificity:
human, mouse

Background Information

XBP1 is also named as XBP2, belongs to the bZIP family. The X-box-binding protein-1 (XBP1) is a transcriptional regulator of the ER stress response that lies downstream of inositol-requiring enzyme 1 (IRE1 α) activation (PMID: 14559994). IRE1 α possesses both kinase and ribonuclease activity and processes XBP1 mRNA to produce an active transcription factor in response to ER stress (PMID: 11779464, 11780124). It has been found that upon accumulation of unfolded proteins in the endoplasmic reticulum, the mRNA of this gene is processed to an active form by an unconventional splicing mechanism that is mediated by the endonuclease inositol-requiring enzyme 1. The resulting loss of 26 nt from the spliced mRNA causes a frame-shift and an isoform XBP1S, which is the functionally active transcription factor. The isoform encoded by the unspliced mRNA, XBP1U, is constitutively expressed, and thought to function as a negative feedback regulator of XBP1S, which shuts off transcription of target genes during the recovery phase of ER stress (PMID: 11850408). The unspliced XBP1U isoform is composed of 261 amino acid residues, and the spliced XBP1S isoform is composed of 376 amino acid residues. The XBP1 antibody (24168-1-AP) can detect both XBP1U and XBP1S.

Storage

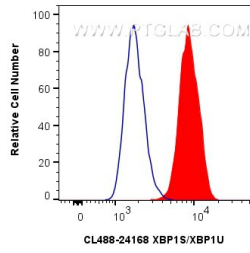
Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



1×10^6 HepG2 cells were intracellularly stained with 0.8 μ g CoraLite® Plus 488 Anti-Human XBP1S/XBP1U (CL488-24168) (red), or 0.8 μ g CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000, Clone:) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).