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Datasheet for 200-301-FZ8

XBP-1 Antibody [3H1G4]

Overview

Description:	Anti-XBP-1 (MOUSE) Antibody - 200-301-FZ8
Item No.:	200-301-FZ8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	X box binding protein 1 (XBP-1) is a key protein in the mammalian unfolded protein response (UPR) that protects the cell against the stress of malfolded proteins in the endoplasmic reticulum (ER). Upon sensing unfolded proteins, an ER transmembrane endonuclease and kinase termed IRE1p is activated and excises an intron from XBP-1 mRNA. The spliced XBP-1 mRNA results in a 371 amino acid protein (XBP-1s) which is then translocated to the nucleus where it binds to the regulatory elements of downstream genes. Together with other UPR transcription factors such as ATF6, XBP-1 stimulates the production of ER stress proteins including the ER resident protein chaperones glucose regulated protein (GRP) 78 and GRP94.
Synonyms:	XBP-1 Antibody [3H1G4] , XBP2, TREB5, XBP-1
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	[3H1G4]
Format:	IgG1

Target Details

Gene Name:	XBP1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein

Immunogen:	Anti-XBP-1 antibody was produced in mice by repeated immunizations with recombinant protein corresponding to 158 amino acids near the N-terminus of human XBP-1.
Purity/Specificity:	Anti-XBP-1 Monoclonal Antibody was Protein A purified. Cross reactivity with XBP-1 [3H1G4] from other sources has not been determined.
Relevant Links:	• UniProtKB - P17861 • GeneID - 7494 • NCBI - NP_001073007.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-XBP-1 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 29 kDa in Western Blots of specific cell lysates and tissues. Validated in human samples. All other applications and species not yet tested.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	4 µg/mL
WB:	1 µg/mL

Formulation

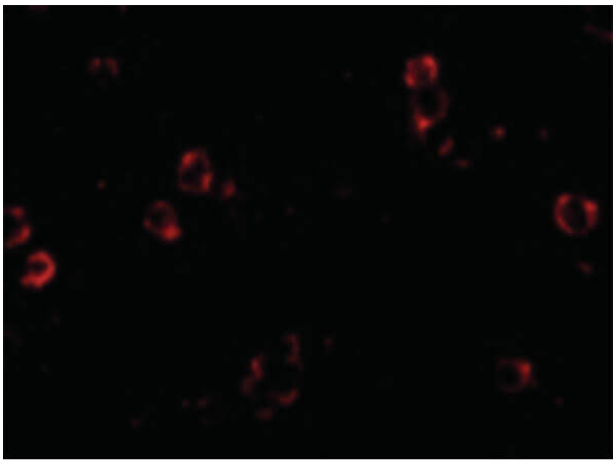
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

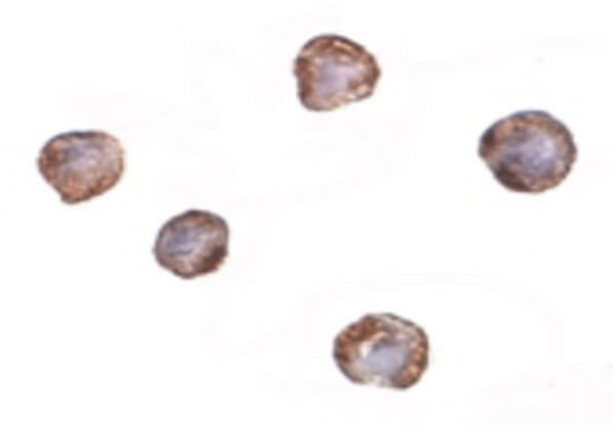
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

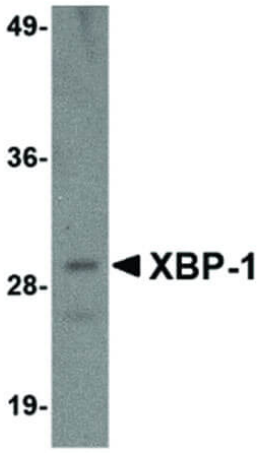
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Mouse anti-XBP1 antibody. Tissue: HepG2 cells. Primary antibody: XBP1 antibody at 4 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:4,000. Localization: XBP1 is located in the endomembrane system. Staining: XBP1 as red fluorescent signal.



Immunocytochemistry
Immunocytochemistry of Mouse anti-XBP-1 antibody. Tissue: HepG2 cells. Primary antibody: XBP-1 antibody at 2 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:2,000. Localization: XBP-1 is located in the endoplasmic reticulum.



Western Blot
Western Blot of Mouse anti-XBP-1 antibody. Lane A: 100 ng of XBP-1 recombinant protein. Primary antibody: XBP-1 antibody at 1 µg/mL overnight at 4℃. Secondary antibody: Mouse HRP secondary antibody. Block: 5% BLOTTO. Observed size: 29/39 kDa, 29 kDa for XBP-1.

Disclaimer

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