

Anti-XBP-1 Monoclonal Antibody [3H1G4]

Catalog Number: M00234-1

About XBP1

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 malformed 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.

Overview

Product Name	Anti-XBP-1 Monoclonal Antibody [3H1G4]
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-XBP-1 Monoclonal Antibody [3H1G4] (Catalog # M00234-1). Tested in ELISA, WB, ICC, IF applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IF, ICC, WB
Clonality	Monoclonal Clone: 3H1G4
Formulation	XBP-1 Monoclonal Antibody is supplied in PBS containing 0.02% sodium azide.
Storage Instructions	XBP-1 monoclonal antibody can be stored at -20°C, stable for one year.
Host	Mouse
Uniprot ID	P17861

Technical Details

Immunogen	Mouse monoclonal XBP-1 antibody was raised against recombinant protein corresponding to amino acids 2 to 160 of human XBP-1.
Predicted Reactive Species	Mouse, Rat
Cross Reactivity	Biotin-GAPDH antibody is human, mouse, rat, and rabbit reactive.
Isotype	IgG1
Form	Liquid
Concentration	1 mg/mL
Purification	XBP-1 Monoclonal Antibody is Protein A purified.

Suggested Dilutions

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

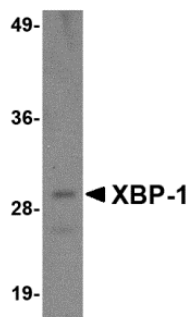
Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

XBP-1 antibody can be used for the detection of XBP-1 by Western blot at 1 ug/mL. Antibody can also be used for immunocytochemistry starting at 2 ug/mL. For immunofluorescence start at 4 ug/mL.

Antibody validated: Immunocytochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

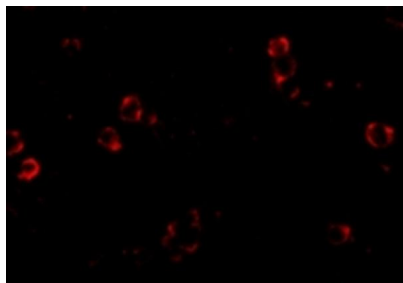
Anti-XBP-1 Monoclonal Antibody [3H1G4] (M00234-1) Images



Western blot analysis of 100 ng of XBP-1 recombinant protein with XBP-1 antibody at 1 ug/mL.



Immunocytochemistry of XBP-1 in HepG2 cells with XBP-1 antibody at 2 ug/mL.



Immunofluorescence of XBP1 in HepG2 cells with XBP1 antibody at 4 ug/mL.

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