

XBP-1 Antibody

Catalog No: #24385

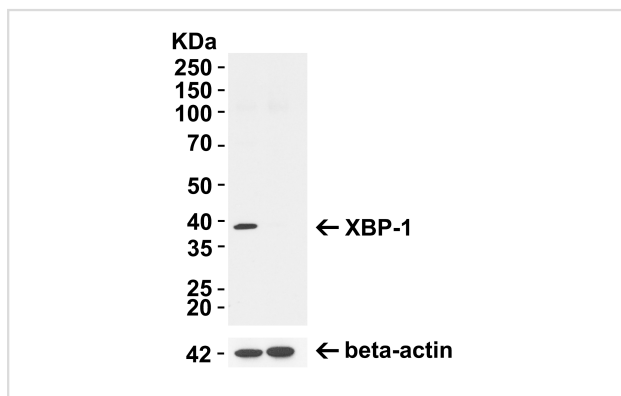
Orders: order@signalwayantibody.com

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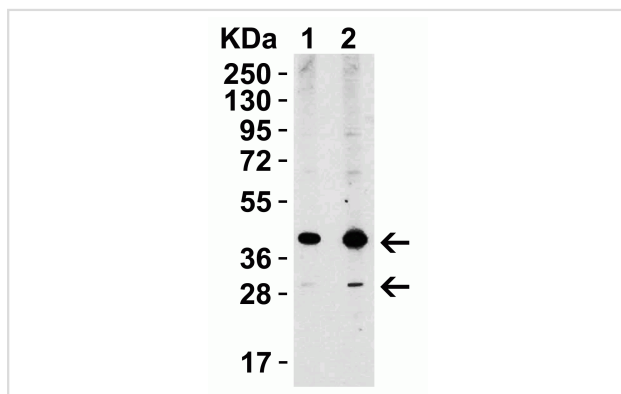
Description

Product Name	XBP-1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu Ms
Immunogen Type	Peptide
Immunogen Description	Raised against a 18 amino acid peptide from near the amino terminus of human XBP-1.
Target Name	XBP-1
Other Names	X box binding protein 1, Tax-responsive element binding protein 5
Accession No.	Swiss-Prot:P17861Gene ID:7494
Uniprot	P17861
GeneID	7494;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

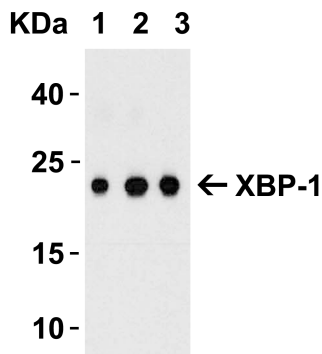
Images



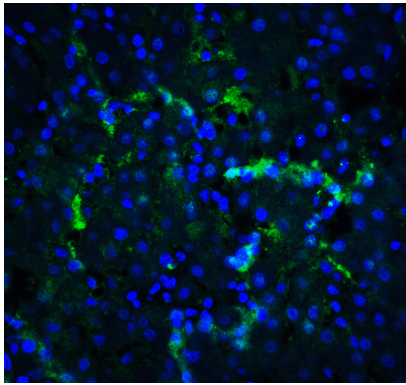
XBP-1 KO Validation in 293T Cells Loading: 10 ug of lysate
Antibodies: XBP-1, 4 ug/mL and beta-actin, 1ug/mL, 1 h
incubation at RT in 5% NFDm/TBST. Secondary: Goat
Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



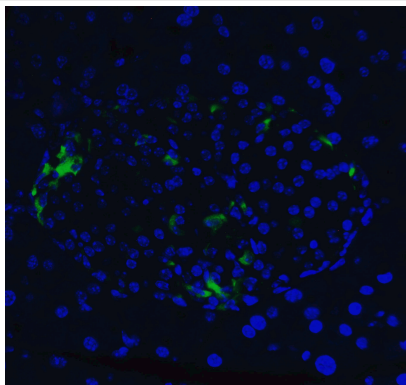
Western Blot Validation of XBP-1 in HepG2 Cells Loading: 15
ug of HepG2 cell lysate Antibodies: XBP-1, 1h incubation at
RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP
conjugate at 1:10000 dilution. Lane1: 1 ug/mL Lane2: 2
ug/mL



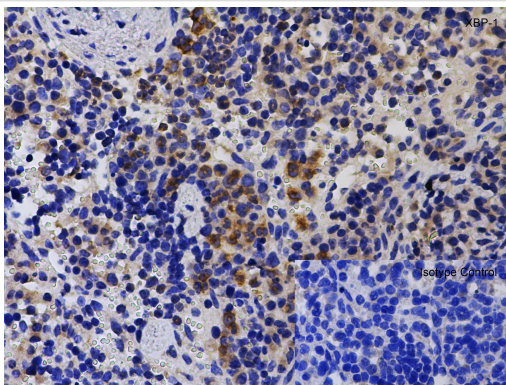
Western Blot Validation with Recombinant Protein Loading: 100 ng of human XBP-1 recombinant protein per lane. Antibodies: XBP-1 (1: 0.5 ug/mL, 2: 1 ug/mL and 3: 2 ug/mL), 1h incubation at RT in 5% NFD/MTBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution. Observed at around 23kD.



Immunofluorescence Validation of XBP-1 in Human Liver Tissue
Immunofluorescent analysis of 4% paraformaldehyde-fixed Human Liver Tissue labeling XBP-1 with at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (green) and DAPI staining (blue).



Immunofluorescence Validation of XBP-1 in Mouse Pancreas Tissue
Immunofluorescent analysis of 4% paraformaldehyde-fixed mouse pancreas tissue labeling XBP-1 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (green) and DAPI staining (blue).



Immunohistochemistry Validation of XBP-1 in Mouse Spleen Tissue
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue using anti-XBP-1 antibody at 2 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.

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 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.

Note: This product is for in vitro research use only