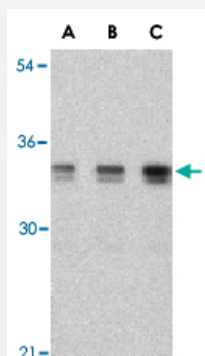


XBP1 polyclonal antibody

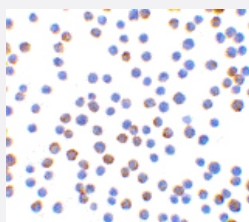
Catalog # PAB13182 Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of XBP1 in HepG2 cell lysate with XBP1 polyclonal antibody (Cat # PAB13182) at (A) 1, (B) 2 and (C) 4 ug/mL .



Immunocytochemistry

Immunocytochemistry of XBP1 in HepG2 cells with XBP1 polyclonal antibody (Cat # PAB13182) at 10 ug/mL .

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of XBP1.
Immunogen	A synthetic peptide corresponding to 18 amino acids near N-terminus of human XBP1.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	Peptide affinity purification

Concentration	1 mg/mL
Recommend Usage	Western Blot (0.5-2 ug/mL) Immunocytochemistry (10 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.02% sodium azide)
Storage Instruction	Store at 4°C for three months. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of XBP1 in HepG2 cell lysate with XBP1 polyclonal antibody (Cat # PAB13182) at (A) 1, (B) 2 and (C) 4 ug/mL .

- Immunocytochemistry

Immunocytochemistry of XBP1 in HepG2 cells with XBP1 polyclonal antibody (Cat # PAB13182) at 10 ug/mL .

- Enzyme-linked Immunoabsorbent Assay

Gene Info — XBP1

Entrez GeneID	7494
Protein Accession#	BAB82982
Gene Name	XBP1
Gene Alias	TREB5, XBP2
Gene Description	X-box binding protein 1
Omim ID	125480 194355
Gene Ontology	Hyperlink

Gene Summary

This gene encodes a transcription factor that regulates MHC class II genes by binding to a promoter element referred to as an X box. This gene product is a bZIP protein, which was also identified as a cellular transcription factor that binds to an enhancer in the promoter of the T cell leukemia virus type 1 promoter. It may increase expression of viral proteins by acting as the DNA binding partner of a viral transactivator. It has been found that upon accumulation of unfolded proteins in the endoplasmic reticulum (ER), 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 (IRE1). The resulting loss of 26 nt from the spliced mRNA causes a frame-shift and an isoform XBP1(S), which is the functionally active transcription factor. The isoform encoded by the unspliced mRNA, XBP1(U), is constitutively expressed, and thought to function as a negative feedback regulator of XBP1(S), which shuts off transcription of target genes during the recovery phase of ER stress. A pseudogene of XBP1 has been identified and localized to chromosome 5. [provided by RefSeq]

Other Designations

OTTHUMP00000028682|X-box-binding protein-1

Publication Reference

- [IRE1 couples endoplasmic reticulum load to secretory capacity by processing the XBP-1 mRNA.](#)

Calfon M, Zeng H, Urano F, Till JH, Hubbard SR, Harding HP, Clark SG, Ron D.

Nature 2002 Jan; 415(6867):92.

Application: WB, Mouse , MEF, Mouse fibroblasts

- [Mammalian transcription factor ATF6 is synthesized as a transmembrane protein and activated by proteolysis in response to endoplasmic reticulum stress.](#)

Haze K, Yoshida H, Yanagi H, Yura T, Mori K.

Molecular Biology of the Cell 1999 Nov; 10(11):3787.

- [The glucose-regulated proteins \(GRP78 and GRP94\): functions, gene regulation, and applications.](#)

Little E, Ramakrishnan M, Roy B, Gazit G, Lee AS.

Crit Rev Eukaryot Gene Expr 1994 Jan; 4(1):1.

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