



XBP1 blocking peptide (CDBP6441)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

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, Jul 2008]

Conjugate	Unconjugated
Applications	Used as a blocking peptide in immunoblotting applications.
Format	Liquid
Concentration	200 µg/mL
Size	0.05 mg
Preservative	None
Storage	-20°C

GENE INFORMATION

Gene Name [XBP1 X-box binding protein 1 \[Homo sapiens \(human\) \]](#)

Official Symbol	XBP1
Synonyms	XBP1; X-box binding protein 1; XBP2; TREB5; XBP-1; X-box-binding protein 1; tax-responsive element-binding protein 5
Entrez Gene ID	7494
mRNA Refseq	NM_001079539
Protein Refseq	NP_001073007
UniProt ID	P17861
Pathway	ATF6-alpha activates chaperone genes; ATF6-alpha activates chaperones; FOXA1 transcription factor network; HTLV-I infection; IRE1alpha activates chaperones; Insulin Signaling; Metabolism of proteins; Non-alcoholic fatty liver disease (NAFLD)
Function	DNA binding; sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity