

Product datasheet for **AM06434SU-N**

XBP1 Mouse Monoclonal Antibody [Clone ID: 1C4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1C4
Applications:	ELISA, WB
Recommended Dilution:	Western Blot: 1/500 - 1/2000. ELISA: 1/10000.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human XBP1 expressed in E. Coli.
Specificity:	This antibody reacts to XBP1.
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% sodium azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	28 kDa
Gene Name:	X-box binding protein 1
Database Link:	Entrez Gene 7494 Human P17861



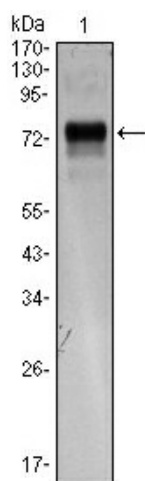
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Background:

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.

Synonyms:

XBP-1, XBP2

Product images:

Western blot analysis using XBP1 mouse mAb against XBP1 (AA: 1-160)-hlgGFc transfected HEK293 cell lysate.