

# XBP1 Monoclonal Antibody

#### Description

Product type Antibody

Code BT-MCA4808

Host Mouse

 Isotype
 Mouse IgG1

 Size
 100 µL, 50 µL

Immunogen Purified recombinant fragment of human XBP1 expressed in E. Coli.

Mol wt 28kDa

Species reactivity Human

Clonality Monoclonal

Recommended application Others

Concentration N/A

Full name N/A

Synonyms XBP2;TREB5;XBP1

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

#### 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.

### Recommended Dilution

WB: 1:500 - 1:2000 ELISA: 1:10000

Not yet tested in other applications.

## Images



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

# Storage

Store at 4°C short term. Aliquot and store at -20°C long term.