



# Recombinant Mouse X-box-binding protein 1 (Xbp1)

<b>Product Code</b>	CSB-EP026183MO-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	O35426
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	MVVVAAAPSA ATAAPKVVLL SGQPASGGRA LPLMVPGPRA AGSEASGTPQ ARKRQRLTHL SPEEKALRRK LKNRVAQA RDRKKARMSE LEQQVVDLEE ENHKLQLENQ LLREKTHGLV VENQELRTRL GMDTLDPDEV PEVEAKGSGV RLVAGSAESA ALRLCAPLQQ VQAQLSPPQN IFPWTLLLP LQILSLISFW AFWTSWTLSC FSNVLPQSL VWRNSQRSTQ KDLVPYQPPF LCQWGPHQPS WKPLMNSFVL TMYTPSL
<b>Source</b>	E.coli
<b>Target Names</b>	Xbp1
<b>Protein Names</b>	Recommended name: X-box-binding protein 1 Short name= XBP-1 Alternative name(s): Tax-responsive element-binding protein 5 homolog
<b>Expression Region</b>	1-267
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	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.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the



contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.