



Recombinant Human X-box-binding protein 1 (XBP1)

Product Code	CSB-EP026183HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P17861
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	MVVVAAAPNP ADGTPKVLLL SGQPASAAGA PAGQALPLMV PAQRGASPEA ASGGLPQARK RQRLTHLSPE EKALRRKLN RVAAQTARDR KKARMSELEQ QVVDLEEENQ KLLLENQLLR EKTHGLVVEN QELRQRLGMD ALVAEEEEAEA KGNEVRPVAG SAESAALRLR APLQQVQAQL SPLQNISPWI LAVLTLQIQS LISCWAFWTT WTQSCSSNAL PQSLPAWRSS QRSTQKDPVP YQPPFLCQWG RHQPSWKPLM N
Source	E.coli
Target Names	XBP1
Protein Names	Recommended name: X-box-binding protein 1 Short name= XBP-1 Alternative name(s): Tax-responsive element-binding protein 5
Expression Region	1-261
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full length protein
Target Details	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.
Reconstitution	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.