

Product datasheet for RC201959

XBP1 (NM_005080) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XBP1 (NM_005080) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XBP1
Synonyms:	TREB-5; TREB5; XBP-1; XBP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201959 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGGTGGTGGCAGCCGCGCCGAACCCGGCCGACGGGACCCCTAAAGTTCTGCTTCTGTGGGGCAGC
CCGCCTCCGCGCCGGAGCCCGGCCGAGGCCCTGCCGTCATGGTGCCAGCCAGAGAGGGGCCAG
CCCGGAGGCAGCGAGCGGGGGCTGCCAGGCGCGCAAGCGACAGCGCCTCACGCACCTGAGCCCCGAG
GAGAAGGCGCTGAGGAGGAACTGAAAAACAGAGTAGCAGCTCAGACTGCCAGAGATCGAAAGAAGGCTC
GAATGAGTGAGCTGGAACAGCAAGTGGTAGATTTAGAAGAAGAGAACCAAAAACCTTTTGCTAGAAAATCA
GCTTTTACGAGAGAAAACCATGGCCTTGTAGTTGAGAACCAGGAGTTAAGACAGCGCTTGGGGATGGAT
GCCCTGGTTGCTGAAGAGGAGGCGGAAGCCAAGGGGAATGAAGTGAAGCCAGTGGCCGGGTCTGCTGAGT
CCGCAGCACTCAGACTACGTGCACCTCTGCAGCAGGTGCAGGCCAGTTGTCAACCCCTCCAGAACATCTC
CCCATGGATTCTGGCGGTATTGACTCTTCAGATTCAGAGTCTGATATCCTGTTGGGCATTCTGGACAAC
TGGACCCAGTCATGTTCTTCAAATGCCCTTCCCAGAGCCTGCCAGCCTGGAGGAGCTCCAGAGGTCTA
CCCAGAAGGACCCAGTTCCTTACCAGCCTCCCTTTCTCTGTCAGTGGGGACGTCATCAGCCAAGCTGGAA
GCCATTAATGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201959 protein sequence
 Red=Cloning site Green=Tags(s)

MVVVAAAPNPADGTPKVVLLSGQPASAAGAPAGQALPLMVPAQRGASPEAASGGLPQARKRQRLTHLSPE
 EKALRRKLNKRVAAQTARDRKKARMSELEQQVVDLEENQKLLLENQLLREKTHGLVVENQELRQRLGMD
 ALVAEEEEAEAKGNEVRPVAGSAESAALRLRAPLQQVQAQLSPLQNI SPWILAVLTLQIQSLISCFWAFWTT
 WTQSCSSNALPQSLPAWRSSQRSTQKDPVPYQPPFLCQWGRHQPSWKPLMN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6011_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_005080

ORF Size: 783 bp

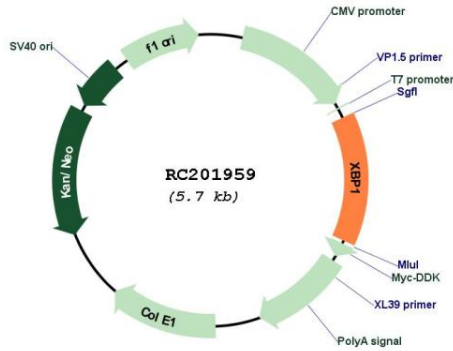
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

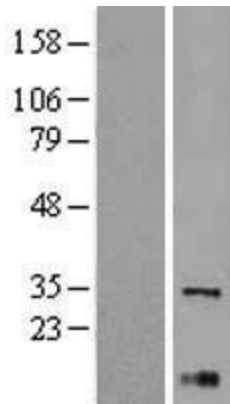
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_005080.3
RefSeq Size:	1820 bp
RefSeq ORF:	786 bp
Locus ID:	7494
UniProt ID:	P17861
Cytogenetics:	22q12
Domains:	BRLZ
Protein Families:	Transcription Factors
MW:	28.7 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC201959



Western blot validation of overexpression lysate (Cat# [LY401569]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201959 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).