

## Product datasheet for **RC224396L4V**

### **XBP1 (NM\_001079539) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	XBP1 (NM_001079539) Human Tagged ORF Clone Lentiviral Particle
Symbol:	XBP1
Synonyms:	TREB-5; TREB5; XBP-1; XBP2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001079539
ORF Size:	1128 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC224396).
OTI Disclaimer:	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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_001079539.1</a> , <a href="#">NP_001073007.1</a>
RefSeq Size:	1810 bp
RefSeq ORF:	1131 bp
Locus ID:	7494
UniProt ID:	<a href="#">P17861</a>
Cytogenetics:	22q12
Protein Families:	Transcription Factors
MW:	40 kDa



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**Gene Summary:**

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]