

## Product datasheet for MC207445

## Xbp1 (NM\_013842) Mouse Untagged Clone

## **Product data:**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product Type:	Expression Plasmids
Product Name:	Xbp1 (NM_013842) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Xbp1
Synonyms:	D11Ertd39e; TREB-5; TREB5; XBP-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC207445 representing NM_013842 Red=Cloning site Blue=ORF
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGGTGGTGGTGGCAGCGGCGCGAGCGCGGCCACGGCGGCCCCCAAAGTGCTACTCTTATCTGGCCAGC CCGCCTCCGGCGGCCGGGCGCTGCCGCTCATGGTACCCGGGCGGG
<b>Restriction Sites:</b>	Sgfl-Mlul
ACCN:	NM_013842
Insert Size:	804 bp



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Scheme Sc	
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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 Meth	<ul> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ul>
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>BC029197</u> , <u>AAH29197</u>
RefSeq Size:	1797 bp
RefSeq ORF:	804 bp
Locus ID:	22433
UniProt ID:	<u>035426</u>
Cytogenetics:	11 3.61 cM
Gene Summary:	<ul> <li>Functions as a transcription factor during endoplasmic reticulum stress by regulating the unfolded protein response (UPR). Required for cardiac myogenesis and hepatogenesis during embryonic development and the development of secretory tissues such as exocrine pancreas and salivary gland (PubMed:10425189, PubMed:10652269, PubMed:16362047, PubMed:17612490). Involved in differentiation of B lymphocytes to plasma cells and production of immunoglobulins. Modulates the cellular response to ER stress in a PIK3R-dependent manner. Binds to the cis-acting X box present in the promoter regions of major histocompatibility complex class II genes (By similarity). Involved in VEGF-induced endothelial cell (EC) proliferation and retinal blood vessel formation during embryonic development but also for angiogenesis in adult tissues under ischemic conditions (PubMed:15486293).</li> <li>Functions also as a major regulator of the UPR in obesity-induced insulin resistance and type 2 diabetes for the management of obesity and diabetes prevention (PubMed:15486293).</li> <li>[UniProtKB/Swiss-Prot Function]</li> <li>Transcript Variant: This variant (1) represents the longer transcript but encodes the shorter isoform, XBP1(U). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</li> </ul>

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