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Product datasheet for MR203542

Xbp1 (NM_013842) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Xbp1 (NM_013842) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Xbp1
Synonyms:	D11Ertd39e; TREB-5; TREB5; XBP-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR203542 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGGTGGTGGCAGCGGCGCCGAGCGCGGCCACGGCGGCCCCCAAAGTGCTACTCTTATCTGGCCAGC
CCGCCTCCGGCGGCCGGGCGCTGCCGCTCATGGTACCCGGTCCGCGGGCAGCAGGGTCGGAGGCGAGCGG
GACACCGCAGGCTCGCAAGCGGCAGCGGCTCACGCACCTGAGCCCGGAGGAGAAAGCGCTGCGGAGGAAA
CTGAAAAACAGAGTAGCAGCGCAGACTGCTCGAGATAGAAAGAAAGCCCGGATGAGCGAGCTGGAGCAGC
AAGTGGTGGATTTGGAAGAAGAGAACCACAAACTCCAGCTAGAAAATCAGCTTTTACGGGAGAAAACTCA
CGGCCTTGTGGTTGAGAACCAGGAGTTAAGAACACGCTTGGGAATGGACACGCTGGATCCTGACGAGGTT
CCAGAGGTGGAGGCCAAGGGGAGTGGAGTAAGGCTGGTGGCCGGGTCTGCTGAGTCCGCAGCACTCAGAC
TATGTGCACCTCTGCAGCAGGTGCAGGCCCAGTTGTCACCTCCCCAGAACATCTTCCCATGGACTCTGAC
ACTGTTGCCTCTTCAGATTCTGAGTCTGATATCCTTTTGGGCATTCTGGACAAGTTGGACCCTGTCATGT
TTTTCAAATGTCCTTCCCCAGAGTCTGCTAGTCTGGAGGAACTCCCAGAGGTCTACCCAGAAGGACCTAG
TTCCTTACCAGCCTCCCTTTCTCTGTCAGTGGGGACCTCATCAGCCAAGCTGGAAGCCATTAATGAACTC
ATTCGTTTTGACCATGTATACACCAAGCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

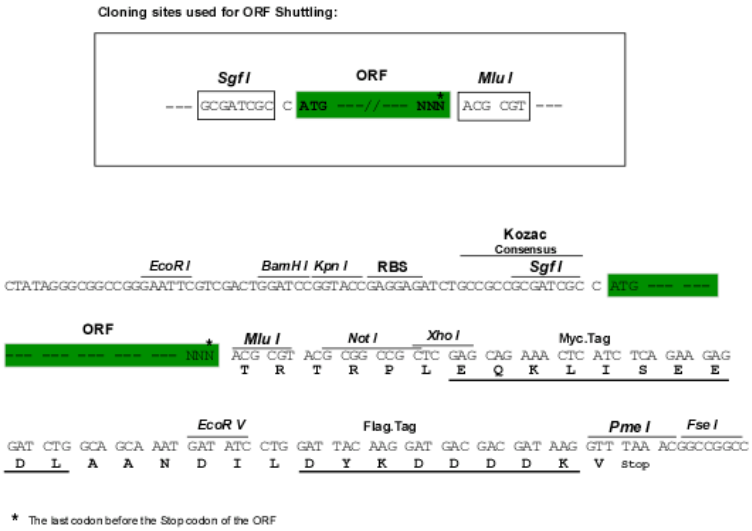
>MR203542 protein sequence
Red=Cloning site Green=Tags(s)

MVVVAAAPSAATAAPKVLLLSGQPASGGRALPLMVPGPRAAGSEASGTPQARKRQRLTHLSPEEKALRRK
LKNRVAAQTARDRKKARMSELEQQVVDLEEENHKLQLENQLLREKTHGLVVENQELRTRLGMDTLDPDEV
PEVEAKGSGVRLVAGSAESAALRLCAPLQQVQAQLSPPQNIFPWTLTLLPLQILSLISFWAFWTSWTLSC
FSNVLPQSLLVWRNSQRSTQKDLVPYQPPFLCQWGPHQPSWKPLMNSFVLTMYTPSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013842

ORF Size: 804 bp

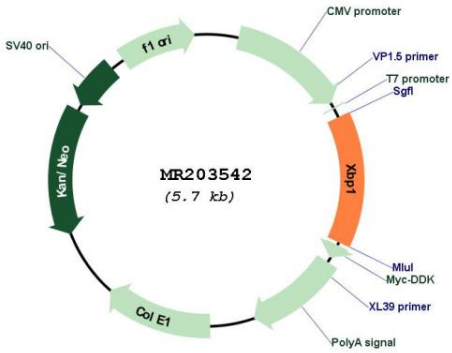
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	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.
RefSeq:	NM_013842.3
RefSeq Size:	2264 bp
RefSeq ORF:	804 bp
Locus ID:	22433
UniProt ID:	O35426
Cytogenetics:	11 3.61 cM
MW:	29.6 kDa
Gene Summary:	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:23529610). 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). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR203542