

Product datasheet for **MC218269**

Xbp1 (BC016079) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Xbp1 (BC016079) Mouse Untagged Clone
Tag: Tag Free
Symbol: Xbp1
Synonyms: XBP-1, TREB5, TREB-5
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >BC016079
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGGTGGTGGCAGCGCGCCGAGCGCGCCACGGCGGCCCAAGTGTACTCTTATCTGGCCAGC
CCGCTCCGGCGCGCGGCGCTGCCGCTCATGGTACCCGGTCCGCGGGCAGCAGGGTCGGAGCGAGCGG
GACACCGCAGGCTCGCAAGCGGCAGCGGCTCACGCACCTGAGCCCGAGGAGAAAAGCGCTCGGAGGAAA
CTGAAAAACAGAGTAGCAGCGCAGACTGCTCGAGATAGAAAGAAAAGCCCGATGAGCGAGCTGGAGCAGC
AAGTGGTGGATTTGGAAGAAGAGAACCACAACTCCAGCTAGAAAATCAGCTTTACGGGAGAAAATCA
CGGCCCTTGTTGTTGAGAACCAGGAGTTAAGAACACGCTTGGGAATGGACACGCTGGATCCTGACGAGTT
CCAGAGGTGGAGGCCAAGCAGGTGCAGGCCAGTTGTACCTCCCAGAACATCTTCCATGGACTCTGA
CACTCGCTCTTCAGATTCTGAGTCTGATATCCTTTGGGCATTCTGGACAAGTTGGACCCTGTCATGTT
TTCAAATGTCTTCCCAGAGTCTGCTAGTCTGGAGAACTCCCAGAGGTCTACCCAGAAGGACCTAGT
TCCTTACCAGCTCCCTTTCTGTGTCAGTGGGGACCTCATCAGCCAAGCTGGAAGCCATTAATGAACTCA
TTCGTTTTGACCATGTATACACCAAGCCTCTAGTTTTAGAGATCCCCTCTGAGACAGAGAGTCAAATA
CGTGGTAGTGAAAATTGAGGAAGCACCTCTAAGCTCTTCAAGAGAGGATCACCTGAATTCATTGTCTCA
GTGAAGAAAGAGCCTTTGGAAGATGACTTCATCCAGAGCTGGGCATCTCAAACCTGCTTTCATCCAGCC
ATTGTCTGAGACCACCTTCTGCCTGCTGGACGCTCACAGTACTGTGGATATGAGGGCTCCCTTCTCC
CTTCAGTGACATGTCTTCTCCACTTGGTACAGACCACTCTGGGAGGATACTTTTGCCAATGAATTTTC
CCCCAGCTGATTAGTGTCTAA

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: BC016079



Insert Size:	1071 bp
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 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.
RefSeq:	<u>BC016079</u> , <u>AAH16079</u>
RefSeq Size:	2054 bp
RefSeq ORF:	1070 bp
Locus ID:	22433
Cytogenetics:	11 3.61 cM
Gene Summary:	<p>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).</p> <p>[UniProtKB/Swiss-Prot Function]</p>