

## **Product datasheet for MR205421L4V**

## OriGene Technologies, Inc.

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## **Xbp1 (BC016079) Mouse Tagged ORF Clone Lentiviral Particle**

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** Xbp1 (BC016079) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Xbp1

**Synonyms:** XBP-1, TREB5, TREB-5

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** BC016079 **ORF Size:** 1068 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR205421).

Sequence:
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. 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.

 RefSeq:
 BC016079.1

 RefSeq Size:
 2054 bp

 RefSeq ORF:
 1070 bp

**Locus ID:** 22433

Cytogenetics: 11 3.61 cM





## **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]