

Product datasheet for CF815377

OriGene Technologies, Inc.

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XBP1 Mouse Monoclonal Antibody [Clone ID: OTI3D12]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI3D12

Applications: WB

Recommended Dilution: WB 1:500

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Human recombinant protein fragment of human XBP1S (NP_001073007) produced in E.coli.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Shipped at -20°C or with ice packs, Upon delivery store at -20°C. Dilute in PBS(pH7.3) if

necessary. Stable for 12 months from date of receipt. Avoid repeated freeze-thaws.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 40 kDa

Gene Name: X-box binding protein 1

Database Link: NP 001073007

Entrez Gene 22433 MouseEntrez Gene 7494 Human

P17861





Background:

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]

Synonyms: TREB-5; TREB5; XBP-1; XBP2

Protein Families: Transcription Factors

Product images:

