A1731

Leader in Biomolecular Solutions for Life Science

XBP1 Rabbit pAb

Catalog No.: A1731 26 Publications

Basic Information

Observed MW

Calculated MW

Polyclonal Antibody

Applications

WB, IF/ICC, ELISA

Cross-Reactivity Human, Mouse, Rat

60kDa

29kDa

Category



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.

Recommended Dilutions

Immunogen Information

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

Gene ID **Swiss Prot** 7494 P17861

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids1-70 of human XBP1 (NP 005071.2).

Synonyms

XBP2; TREB5; XBP-1; TREB-5; XBP1

Contact

Product Information

€ www.abclonal.com Source Rabbit

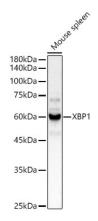
Isotype lgG

Purification Affinity purification

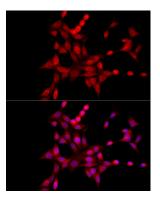
Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of lysates from Mouse spleen, using XBP1 Rabbit pAb (A1731) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 90s.



Immunofluorescence analysis of NIH/3T3 cells using XBP1 Rabbit pAb (A1731) at dilution of 1:100 (40x lens).Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.