Datasheet for ABIN969462

anti-XBP1 antibody

1 Image | 3 Publications

Go to Product page

Overview

Quantity:	100 µL
Target:	XBP1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This XBP1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	Purified recombinant fragment of human XBP1 expressed in E. coli.
Clone:	1C4
Isotype:	IgG1
Purification:	purified

Target Details

Target:	XBP1
Alternative Name:	XBP1 (XBP1 Products)
Background:	Description: 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

Target Details

	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. Aliases: XBP2, TREB5, XBP1
Molecular Weight:	28 kDa
Gene ID:	7494
HGNC:	7494
Pathways:	ER-Nucleus Signaling, Unfolded Protein Response

Application Details

Application Notes:	ELISA: 1:10000, WB: 1:500 - 1:2000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Ascitic fluid containing 0.03 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C
Storage Comment:	4°C, -20°C for long term storage

Publications

Product cited in:	Martino, Olsen, Fulcher, Wolfgang, ONeal, Ribeiro: "Airway epithelial inflammation-induced endoplasmic reticulum Ca2+ store expansion is mediated by X-box binding protein-1." in: **The**

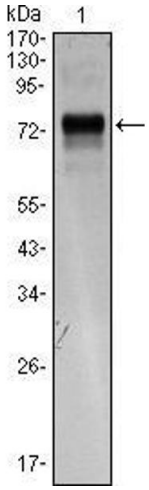
Publications

Journal of biological chemistry, Vol. 284, Issue 22, pp. 14904-13, (2009) (PubMed).

Schardt, Weber, Eyholzer, Mueller, Pabst: "Activation of the unfolded protein response is associated with favorable prognosis in acute myeloid leukemia." in: **Clinical cancer research : an official journal of the American Association for Cancer Research**, Vol. 15, Issue 11, pp. 3834-41, (2009) (PubMed).

Jiang, Yang, Thorne, Zhu, Hersey, Zhang: "Human melanoma cells under endoplasmic reticulum stress acquire resistance to microtubule-targeting drugs through XBP-1-mediated activation of Akt." in: **Neoplasia (New York, N.Y.)**, Vol. 11, Issue 5, pp. 436-47, (2009) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis using XBP1 mouse mAb against XBP1(AA: 1-160)-hIgGFc transfected HEK293 cell lysate.