Datasheet for 600-401-H32

XBP-1 Antibody

Overview

Description:	Anti-XBP-1 (RABBIT) Antibody - 600-401-H32
Item No.:	600-401-H32
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	XBP-1 antibody detects human XBP-1. X box binding protein 1 (XBP-1) is a key protein in the mammalian unfolded protein response (UPR) that protects the cell against the stress of malfolded proteins in the endoplasmic reticulum (ER). Upon sensing unfolded proteins, an ER transmembrane endonuclease and kinase termed IRE1p is activated and excises an intron from XBP-1 mRNA. The spliced XBP-1 mRNA results in a 371 amino acid protein (XBP-1s) which is then translocated to the nucleus where it binds to the regulatory elements of downstream genes. Together with other UPR transcription factors such as ATF6, XBP-1 stimulates the production of ER stress proteins including the ER resident protein chaperones glucose regulated protein (GRP) 78 and GRP94. Anti-XP1 is ideal for investigators involved in enzyme, cell cycle proteins and cancer research.
Synonyms:	TREB5, XBP2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	XBP1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	XBP-1 Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the c-terminus of human XBP-1.
Purity/Specificity:	Anti-XBP-1 Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with XBP-1 with Human, Mouse and Rat based on 100% homology with the immunizing sequence. Cross-reactivity with XBP-1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P17861 • GeneID - 7494

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-XBP-1 Antibody is tested for use in E, WB, and ICC. Expect a band approximately ~28.6 kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	0.5-2 ug/mL

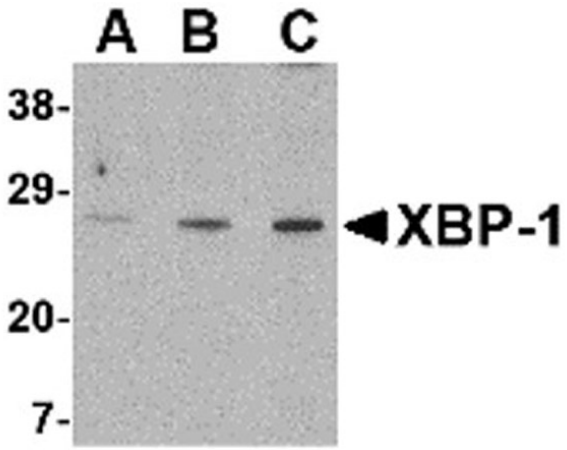
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

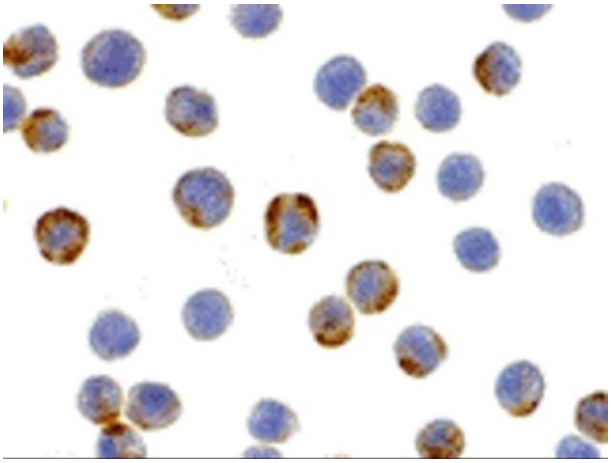
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western blot analysis of XBP-1.
Load: PC-3 cell lysate.
Primary Antibody: Anti-XBP-1 antibody at (A) 0.5µg/mL, (B) 1µg/mL and (C) 2µg/mL.



Immunocytochemistry
Immunocytochemistry of XBP-1.
Cell: HepG2 cells.
Primary Antibody: Anti-XBP-1 antibody at 2 µg/mL.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.