

**Datasheet for 200-301-FZ9****XBP-1 Antibody [9B7E5]****Overview**

|                      |   |
|----------------------|---|
| <b>Description:</b>  | Anti-XBP-1 (MOUSE) Antibody - 200-301-FZ9 |
| <b>Item No.:</b>     | 200-301-FZ9                               |
| <b>Size:</b>         | 100 µg                                    |
| <b>Applications:</b> | ELISA, IF, IHC, WB                        |
| <b>Reactivity:</b>   | Human, Mouse, Rat                         |
| <b>Host Species:</b> | Mouse                                     |

**Product Details**

|                      |   |
|----------------------|---|
| <b>Background:</b>   | 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 malformed 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. |
| <b>Synonyms:</b>     | XBP-1 Antibody [9B7E5] , XBP2, TREB5, XBP1  |
| <b>Host Species:</b> | Mouse   |
| <b>Clonality:</b>    | Monoclonal  |
| <b>Clone ID:</b>     | [9B7E5]   |

**Target Details**

|                        |  |
|------------------------|--|
| <b>Gene Name:</b>      | XBP1   |
| <b>Reactivity:</b>     | Human, Mouse, Rat  |
| <b>Immunogen Type:</b> | Recombinant Protein  |
| <b>Immunogen:</b>      | Anti-XBP-1 antibody was produced in mice by repeated immunizations with recombinant protein corresponding to 158 amino acids near the N-terminus of human XBP-1. |

**Purity/Specificity:** Anti-XBP-1 Monoclonal Antibody is immunoaffinity chromatography purified IgG. Cross reactivity with XBP-1 [9B7E5] from other sources has not been determined.

**Relevant Links:**

- [UniProtKB - P17861](#)
- [GeneID - 7494](#)
- [NCBI - NP\\_001073007.1](#)

## Application Details

**Tested Applications:** ELISA, IF, IHC, WB

**Application Note:** Anti-XBP-1 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 29 kDa in Western Blots of specific cell lysates and tissues. Validated in human samples. All other applications and species not yet tested.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**ELISA:** 1:10,000

**IF:** 4 µg/mL

**WB:** 1 µg/mL

## Formulation

**Physical State:** Liquid (sterile filtered)

**Concentration:** 1.0 mg/ml by UV absorbance at 280 nm

**Buffer:** 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

**Preservative:** 0.02% (w/v) Sodium Azide

**Stabilizer:** None

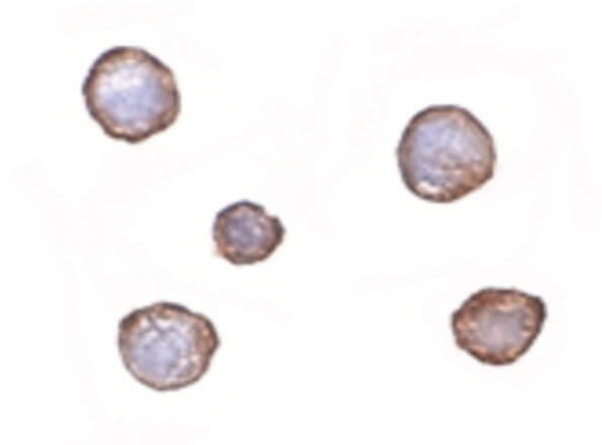
## Shipping & Handling

**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.

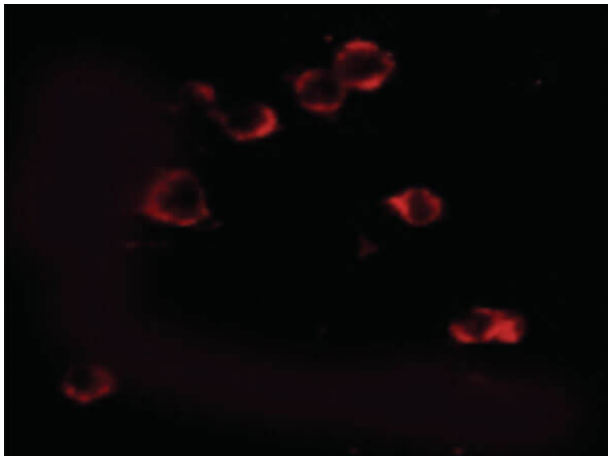
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



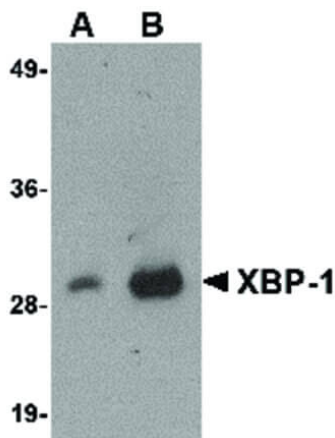
### Western Blot

Immunocytochemistry of Mouse anti-XBP-1 antibody. Tissue: HepG2 cells. Primary antibody: XBP-1 antibody at 2  $\mu\text{g}/\text{mL}$ . Secondary antibody: Peroxidase mouse secondary antibody at 1:2,000. Localization: XBP-1 is located on the endoplasmic reticulum.



### Immunofluorescence Microscopy

Immunofluorescence Microscopy of Mouse anti-XBP1 antibody. Tissue: HepG2 cells. Primary antibody: XBP1 antibody at 2  $\mu\text{g}/\text{mL}$ . Secondary antibody: Peroxidase mouse secondary antibody at 1:2,000. Localization: XBP-1 is located on the endoplasmic reticulum. Staining: XBP-1 as red fluorescent signal.



### Western Blot

Western Blot of Mouse anti-XBP-1 antibody. Lane A: 100 ng of XBP-1 recombinant protein. Primary antibody: XBP-1 antibody at 1  $\mu\text{g}/\text{mL}$  overnight at 4 $^{\circ}\text{C}$ . Secondary antibody: Mouse HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 29/39 kDa, 29 kDa for XBP-1.

## 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.