

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **IREB2** polyclonal antibody

Catalog: BS67748 Host: Rabbit Reactivity: Human, Mouse, Rat

## **BackGround:**

Iron regulatory proteins (IRPs; also known as IREBs) are RNA-binding proteins that recognize iron-responsive elements (IREs) and play an important role in maintaining iron homeostasis in mammalian cells. IREs are conserved cis-regulatory hairpin structures located within the 5' or 3' untranslated regions (UTRs) of target mRNAs. IRPs inhibit translation when bound to IREs within the 5' UTR of mRNA encoding for proteins involved in iron storage, export, and utilization. IRP binding to multiple IREs within the 3' UTR of transferin receptor 1 (TFR1) mRNA prevents its degradation, thereby augmenting translation of TFR1 and increasing iron uptake into cells. Dysregulation of IRPs has been associated with human cancers.

In iron replete cells, FBXL5 targets IRP2 for degradation. Under iron deficiency and/or hypoxic conditions, FBXL5 is destabilized, resulting in IRP2 accumulation and interaction with IRE-containing mRNA.

#### **Product:**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

## **Molecular Weight:**

~ 104 kDa

#### **Swiss-Prot:**

P48200

## **Purification&Purity:**

The antibody was purified by immunogen affinity chromatography.

## **Applications:**

WB (1/500 - 1/1000), IF/ICC (1/50 - 1/200)

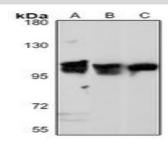
## Storage&Stability:

Store at  $4 \,\mathrm{C}$  short term. Aliquot and store at  $-20 \,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

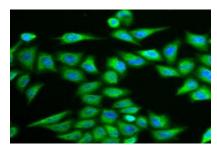
## **Specificity:**

Recognizes endogenous levels of IREB2 protein.

#### **DATA:**



Western blot analysis of IREB2 expression in HEK293T (A), mouse kidney (B), rat liver (C) whole cell lysates.



Immunofluorescent analysis of IREB2 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

#### Note:

For research use only, not for use in diagnostic procedure.

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