

IREB2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58227**Specification**

IREB2 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	P48200
Reactivity	Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	105 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IREB2
Epitope Specificity	101-200/963
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm.
SIMILARITY	Belongs to the aconitase/IPM isomerase family.
Post-translational modifications	Ubiquitinated and degraded by the proteasome in presence of high level of iron and oxygen. Ubiquitinated by a SCF complex containing FBXL5. Upon iron and oxygen depletion FBXL5 is degraded, preventing ubiquitination and allowing its RNA-binding activity.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

Iron metabolism is essential for sustaining mammalian homeostasis. Iron uptake and distribution is a highly regulated process in mammalian cells that is monitored by two iron sensing proteins: IRP-1 and -2 (iron regulatory protein-1 and -2), also known as iron responsive element-binding protein-1 and -2 (IRE-BP-1 and -2) or aconitase 1 and 2. IRP-1 and IRP-2 are important soluble regulatory factors that mediate iron uptake and storage in mammalian cells. They are capable of either repressing translation or enhancing mRNA stability by associating with stem-loop motifs known as iron-responsive elements (IREs). IRPs respond to stress mediators, iron concentration and signaling factors, including nitrogen monoxide, cytokines and hydrogen peroxide.

IREB2 Polyclonal Antibody - Additional Information**Gene ID 3658**

Other Names

Iron-responsive element-binding protein 2, IRE-BP 2, Iron regulatory protein 2, IRP2, IREB2

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

IREB2 Polyclonal Antibody - Protein Information

Name IREB2

Function

RNA-binding protein that binds to iron-responsive elements (IRES), which are stem-loop structures found in the 5'-UTR of ferritin, and delta aminolevulinic acid synthase mRNAs, and in the 3'-UTR of transferrin receptor mRNA. Binding to the IRE element in ferritin results in the repression of its mRNA translation. Binding of the protein to the transferrin receptor mRNA inhibits the degradation of this otherwise rapidly degraded mRNA.

Cellular Location

Cytoplasm.

IREB2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IREB2 Polyclonal Antibody - Images