

## **MINA Antibody**

Catalog # ASC11072

## **Specification**

## **MINA Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IHC, IF

O8IUF8

NP\_694822, 110227621

Human, Mouse

Rabbit

Polyclonal

IgG

MINA antibody can be used for detection of

MINA by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

# **MINA Antibody - Additional Information**

Gene ID **84864** 

**Target/Specificity** 

MINA;

### **Reconstitution & Storage**

MINA antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

MINA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### MINA Antibody - Protein Information

#### Name RIOX2 (HGNC:19441)

### **Function**

Oxygenase that can act as both a histone lysine demethylase and a ribosomal histidine hydroxylase. Is involved in the demethylation of trimethylated 'Lys-9' on histone H3 (H3K9me3), leading to an increase in ribosomal RNA expression. Also catalyzes the hydroxylation of 60S ribosomal protein L27a on 'His-39'. May play an important role in cell growth and survival. May be involved in ribosome biogenesis, most likely during the assembly process of pre-ribosomal particles.

### **Cellular Location**

Nucleus. Nucleus, nucleolus

## **Tissue Location**



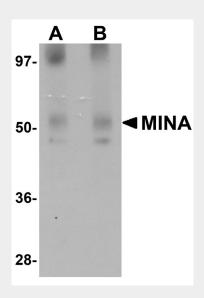
Expressed in liver, skeletal muscle, heart, pancreas, and placenta. Not detected in brain, lung or kidney Expressed in several lung cancer tissues, but is barely detected in the adjacent non-cancerous tissues. Also highly expressed in several esophageal squamous cell carcinoma (ESCC), and colon cancer tissues, and in various cancer cell lines.

## **MINA Antibody - Protocols**

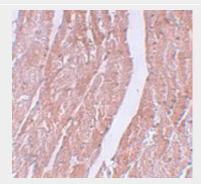
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# MINA Antibody - Images

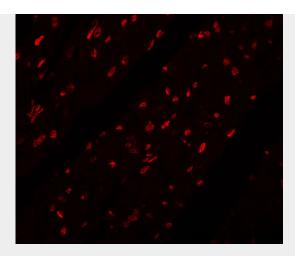


Western blot analysis of MINA in human heart tissue lysate with MINA antibody at (A) 1 and (B) 2  $\mu$ g/mL.



Immunohistochemistry of MINA in mouse heart tissue with MINA antibody at 5 μg/mL.





Immunofluorescence of MINA in mouse heart tissue with MINA antibody at 20 µg/mL.

## MINA Antibody - Background

MINA Antibody: MINA is nuclear localized, myc-inducible protein that is thought to play a role in mammalian cell proliferation. Treatment of cancer cells lines such as the colon cancer cell line SW680 with siRNA against MINA inhibits cell growth, demonstrating that MINA may be a potential therapeutic target. MINA regulates several genes related to cell adhesion and metabolism that have also been shown to be regulated by c-Myc, but also regulates other genes whose expression are not modulated by c-Myc such as EGFR, IL-6 and HGF. MINA has also been found to act as a repressor to IL-4 expression in T cells, indicating that it may also play a role in T cell differentiation and genetic variation in T helper type 2 bias.

## **MINA Antibody - References**

Tsuneoka M, Kody Y, Soejima M, et al. A novel myc target gene, mina53, that is involved in cell proliferation. J. Biol. Chem.2002; 277:35450-9.

Teye K, Tsuneoka M, Arima N, et al. Increased expression of a Myc target gene Mina53 in human colon cancer. Am. J. Pathol.2004; 164:205-16.

Komiya K, Sueoka-Aragane N, Sato A, et al. Mina53, a novel c-Myc target gene, is frequently expressed in lung cancers and exerts oncogenic property in NIH/3T3 cells. J. Cancer Res. Clin. Oncol.2010; 136:465-73.

Okamoto M, Van Stry M, Chung L, et al. Mina, an IL4 repressor, controls T helper type 2 bias. Nat. Immunol.2009: 10:872-9.