

# **MSRA Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7321A

# **Specification**

# MSRA Antibody (N-term) - Product Information

Application IF, FC, IHC-P, WB,E

Primary Accession Q9UJ68
Other Accession P54149

Reactivity Human, Mouse

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 26132
Antigen Region 34-63

# MSRA Antibody (N-term) - Additional Information

#### **Gene ID 4482**

### **Other Names**

Mitochondrial peptide methionine sulfoxide reductase, Peptide-methionine (S)-S-oxide reductase, Peptide Met(O) reductase, Protein-methionine-S-oxide reductase, PMSR, MSRA

# Target/Specificity

This MSRA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 34-63 amino acids from the N-terminal region of human MSRA.

### **Dilution**

IF~~1:100 FC~~1:10~50 IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

# **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

MSRA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# MSRA Antibody (N-term) - Protein Information



# **Name MSRA**

**Function** Has an important function as a repair enzyme for proteins that have been inactivated by oxidation. Catalyzes the reversible oxidation-reduction of methionine sulfoxide in proteins to methionine.

#### **Cellular Location**

[Isoform 1]: Mitochondrion. [Isoform 3]: Cytoplasm. Nucleus.

#### **Tissue Location**

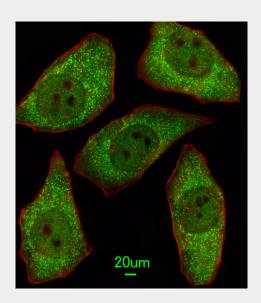
Ubiquitous. Highest expression in adult kidney and cerebellum, followed by liver, heart ventricles, bone marrow and hippocampus

# MSRA Antibody (N-term) - Protocols

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

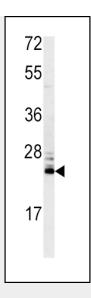
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# MSRA Antibody (N-term) - Images

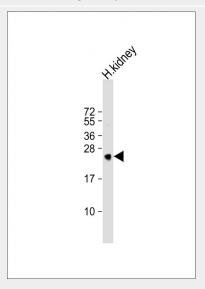


Immunofluorescent analysis of A549 cells, using MSRA Antibody (N-term) (Cat. #AP7321a). AP7321a was diluted at 1:100 dilution. Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Dylight Fluor® 554 (red) conjugated Phalloidin (red).



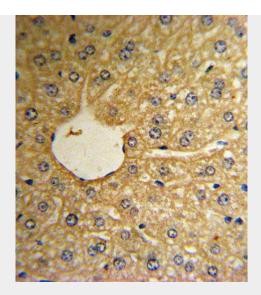


Western blot analysis of MSRA antibody (N-term) (Cat.#AP7321a) in mouse kidney tissue lysates (35ug/lane). MSRA (arrow) was detected using the purified Pab.

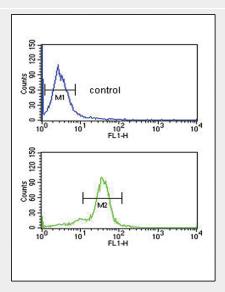


Anti-MSRA Antibody (N-term) at 1:1000 dilution + human kidney lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with MSRA Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



MSRA Antibody (N-term) (Cat. #AP7321a) flow cytometric analysis of MDA-MB435 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# MSRA Antibody (N-term) - Background

MSRA is ubiquitous and highly conserved. This protein carries out the enzymatic reduction of methionine sulfoxide to methionine. Human and animal studies have shown the highest levels of expression in kidney and nervous tissue. The protein's proposed function is the repair of oxidative damage to proteins to restore biological activity.

# MSRA Antibody (N-term) - References

Pascual,I., Larrayoz,I.M. Genomics 93 (1), 62-71 (2009) Schallreuter,K.U., Rubsam,K. J. Invest. Dermatol. 128 (4), 808-815 (2008) Picot,C.R., Perichon,M. FEBS Lett. 558 (1-3), 74-78 (2004) Vougier,S., Mary,J. Biochem. J. 373 (PT 2), 531-537 (2003)