

MSRB2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56872**Specification****MSRB2 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9Y3D2
Reactivity	Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MSRB2
Epitope Specificity	31-130/182
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	Mitochondrion.
SIMILARITY	Belongs to the MsrB Met sulfoxide reductase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

Methionine is one of the most readily oxidized essential amino acids and an intermediate in the biosynthesis of cysteine, carnitine, taurine, lecithin, phosphatidylcholine and other phospholipids. In its oxidative state, Methionine is regulated *in vivo* by methionine sulfoxide reductases (Msr). Msrb2 is a 182 amino acid mitochondrial protein that is ubiquitously expressed. Belonging to the MsrB Met sulfoxide reductase family, Msrb2 acts as a catalyst for the reduction of free and protein-bound methionine sulfoxide to methionine. Upon oxidative stress, Msrb2 is suggested to play a role in the preservation of mitochondrial integrity by decreasing the intracellular reactive oxygen species build-up through its scavenging role, hence contributing to cell survival and protein maintenance. Msrb2 utilizes zinc ions, one per subunit, as cofactors.

MSRB2 Polyclonal Antibody - Additional Information**Gene ID 22921****Other Names**

Methionine-R-sulfoxide reductase B2, mitochondrial, Msrb2, 1.8.4.12, MSRB2, CBS-1, MSRB

Target/Specificity

Ubiquitous. Detected in retina, ocular ciliary body, skeletal muscle, heart, colon, bone marrow, cerebellum, small intestine, fetal brain, fetal liver, kidney, spinal cord, lung, placenta and prostate.

Dilution

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.

MSRB2 Polyclonal Antibody - Protein Information

Name MSRB2

Synonyms CBS-1, MSRB

Function

Methionine-sulfoxide reductase that specifically reduces methionine (R)-sulfoxide back to methionine. While in many cases, methionine oxidation is the result of random oxidation following oxidative stress, methionine oxidation is also a post-translational modification that takes place on specific residue. Upon oxidative stress, may play a role in the preservation of mitochondrial integrity by decreasing the intracellular reactive oxygen species build-up through its scavenging role, hence contributing to cell survival and protein maintenance.

Cellular Location

Mitochondrion

Tissue Location

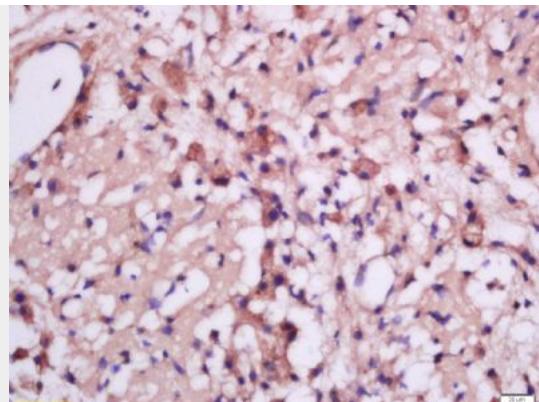
Ubiquitous. Detected in retina, ocular ciliary body, skeletal muscle, heart, colon, bone marrow, cerebellum, small intestine, fetal brain, fetal liver, kidney, spinal cord, lung, placenta and prostate.

MSRB2 Polyclonal Antibody - Protocols

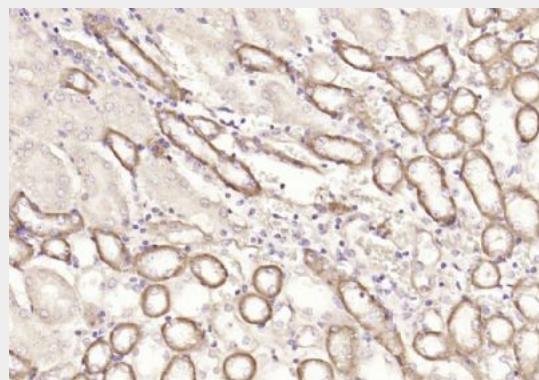
Provided below are standard protocols that you may find useful for product applications.

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

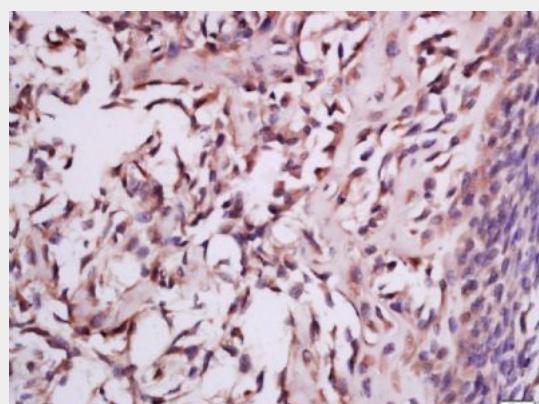
MSRB2 Polyclonal Antibody - Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-MSRB2 Polyclonal Antibody, Unconjugated(bs-17861R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (mouse kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MSRB2) Polyclonal Antibody, Unconjugated (bs-17861R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Tissue/cell: mouse embryo tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-MSRB2 Polyclonal Antibody, Unconjugated(bs-17861R) 1:200, overnight at 4°C,
followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining