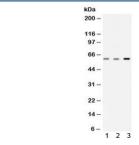


# Catalase Antibody (R32390)

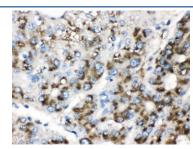
Catalog No.	Formulation	Size
R32390	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

## **Bulk quote request**

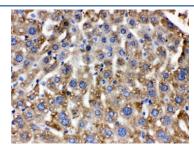
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P04040
Localization	Cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This Catalase antibody is available for research use only.



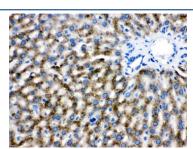
Western blot testing of 1) rat skeletal muscle, 2) mouse skeletal muscle and 3) human A549 lysate with Catalase antibody. Expected/observed molecular weight  $\sim$ 60 kDa.



IHC testing of FFPE human liver cancer tissue with Catalase antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to testing.



IHC testing of FFPE mouse liver with Catalase antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to testing.



IHC testing of FFPE rat liver with Catalase antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to testing.

## **Description**

Catalase is a key antioxidant enzyme in the bodies defensing against oxidative stress. It is also a heme enzyme that is present in the peroxisome of nearly all aerobic cells. Catalase converts the reactive oxygen species hydrogen peroxide to water and oxygen and thereby mitigates the toxic effects of hydrogen peroxide. Oxidative stress is hypothesized to play a role in the development of many chronic or late-onset diseases such as diabetes, asthma, Alzheimer's disease, systemic lupus erythematosus, rheumatoid arthritis, and cancers. Polymorphisms in this gene have been associated with decreases in catalase activity but, to date, acatalasemia is the only disease known to be caused by this gene.

### **Application Notes**

Optimal dilution of the Catalase antibody should be determined by the researcher.

#### **Immunogen**

Amino acids E344-L527 of the human protein were used as the immunogen for the Catalase antibody.

#### **Storage**

After reconstitution, the Catalase antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.