

### **Catalase Antibody (Center)**

Rabbit Polyclonal Antibody Catalog # ABV11277

### **Specification**

# **Catalase Antibody (Center) - Product Information**

Application WB, IHC
Primary Accession P04040
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 59756

## **Catalase Antibody (Center) - Additional Information**

Gene ID 847

Positive Control Western blot: Mouse kidney tissue lysate,

IHC: human lung carcinoma, FACS: 293

cells

Application & Usage Western blot: ~1:1000, IHC: ~1:50-1:100,

FACS: ~1:10-1:50.

1-1----

Other Names CAT; Catalase

**Target/Specificity** 

Catalase

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

**Formulation** 

100 µl of antibody in PBS with 0.09% (W/V) sodium azide

Handling

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

### **Precautions**

Catalase Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.



### **Catalase Antibody (Center) - Protein Information**

#### Name CAT

### **Function**

Catalyzes the degradation of hydrogen peroxide (H(2)O(2)) generated by peroxisomal oxidases to water and oxygen, thereby protecting cells from the toxic effects of hydrogen peroxide (PubMed:<a href="http://www.uniprot.org/citations/7882369" target="\_blank">7882369</a>). Promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells (PubMed:<a href="http://www.uniprot.org/citations/7882369" target=" blank">7882369</a>).

### **Cellular Location**

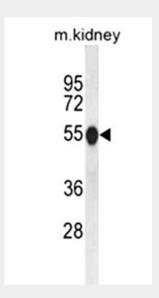
Peroxisome

## Catalase Antibody (Center) - Protocols

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

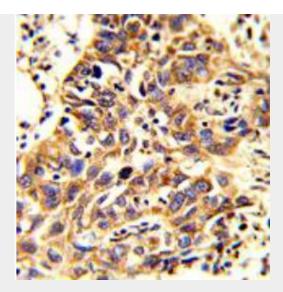
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Catalase Antibody (Center) - Images



Western blot analysis with Mouse kidney tissue lysates (35  $\mu$ g/lane). Catalase (arrow) was detected using the purified pAb.





Formalin-fixed and paraffin-embedded human lung carcinoma reacted with Catalase antibody , 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.

### Catalase Antibody (Center) - Background

Catalase is a peroxisome specific marker protein belonging to the catalase family. Defects in the gene encoding for the catalase protein can cause acatalasia, a disease characterized by the absence of catalase activity in red cells and associated with ulcerating oral lesions. Catalase is also an important regulator of oxidative stress and inflammation, and may contribute to the development of rheumatoid arthritis. Catalase, which can form a homotetramer, is found in all nearly all aerobically respiring organisms and functions in protecting cells from the toxic effects of hydrogen peroxide.