

#### **CAT Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8623c

#### Specification

# CAT Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>P04040</u> <u>P04762</u>, <u>062839</u>, <u>P24270</u>, <u>09PT92</u>, <u>P00432</u> Human, Mouse Bovine, Zebrafish, Pig, Rat Rabbit Polyclonal Rabbit IgG 152-180

## CAT Antibody (Center) - Additional Information

Gene ID 847

Other Names Catalase, CAT

Target/Specificity

This CAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 152-180 amino acids from the Central region of human CAT.

**Dilution** WB~~1:2000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

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

## **CAT 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:<u>7882369</u>). Promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells (PubMed:<u>7882369</u>).

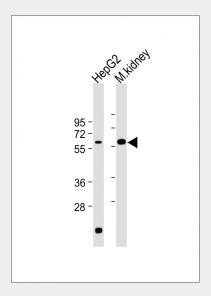
**Cellular Location** Peroxisome matrix

## CAT Antibody (Center) - Protocols

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

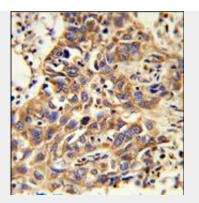
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **CAT Antibody (Center) - Images**

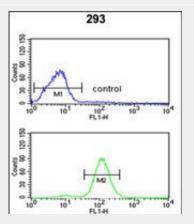


All lanes : Anti-CAT Antibody (Center) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Mouse kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human lung carcinoma reacted with CAT Antibody (Center), 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.



CAT Antibody (Center) (Cat. #AP8623c) flow cytometric analysis of 293 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## CAT Antibody (Center) - Background

CAT occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic effects of hydrogen peroxide. It promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells.

## CAT Antibody (Center) - References

Oh,J.H., et.al., Mamm. Genome 16 (12), 942-954 (2005)

- **CAT Antibody (Center) Citations** 
  - Cardiac fatty acid uptake and metabolism in the rat model of polycystic ovary syndrome.
  - The expression and activity of antioxidant enzymes in the liver of rats exposed to high-fructose diet in period from weaning to adulthood.