

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 FC, IHC-P, WB,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 $FC \sim 1:10 \sim 50$ $IHC-P \sim 1:50 \sim 100$ $WB \sim 1:2000$ $E \sim -Use$ at an assay dependent concentration.

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.