10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CAT Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8623c

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P04040
Other Accession	P04762, O62839, P24270, Q9PT92, P00432
Reactivity	Human, Mouse
Predicted	Bovine, Zebrafish, Mouse, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21613
Calculated MW	59756
Antigen Region	152-180

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	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~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.

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:7882369). Promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells (PubMed:7882369).

Cellular Location Peroxisome matrix

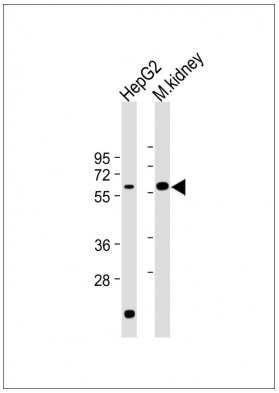
Background

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.

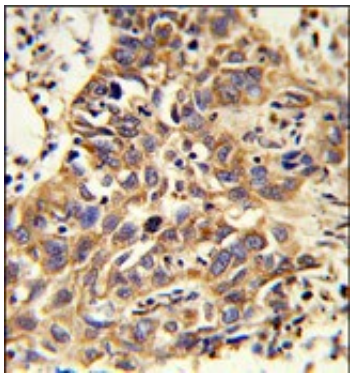
References

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

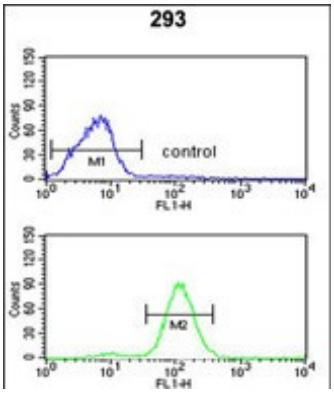
Images



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.

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.