

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

Mouse Monoclonal Antibody (Mab)
Catalog # AM2118a

### **Specification**

# CAT Antibody (Center) (Ascites) - Product Information

Application WB,E
Primary Accession P04040

Other Accession <u>P04762</u>, <u>062839</u>,

P24270, Q9PT92,

P00432, NP\_001743.1

Reactivity Human, Mouse Predicted Bovine, Zebrafish,

Pig, Rat

Host Mouse
Clonality Monoclonal
Isotype IgG2a
Antigen Region 152-180

# CAT Antibody (Center) (Ascites) - Additional Information

Gene ID 847

# Other Names Catalase, CAT

## Target/Specificity

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

#### **Dilution**

WB~~1:1600

#### **Format**

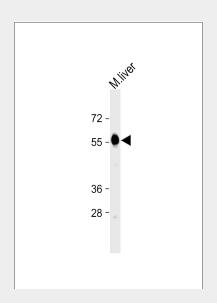
Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

# Storage

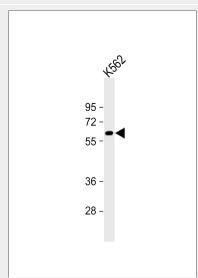
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

CAT Antibody (Center) (Ascites) is for



"Anti-CAT Antibody (Center) (Ascites) at 1:1600 dilution + mouse liver lysate Secondary Goat Anti-mouse IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59756 Da Blocking/Dilution buffer: 5% NFDM/TBST."



"Anti-CAT Antibody (Center) (Ascites) at 1:1600 dilution + K562 whole cell lysate Secondary Goat Anti-mouse IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size: 59756 Da



Tel: 858.875.1900 Fax: 858.622.0609

research use only and not for use in diagnostic or therapeutic procedures.

#### CAT Antibody (Center) (Ascites) - Protein Information

#### Name CAT

#### **Function**

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

#### **Cellular Location**

Peroxisome.

# CAT Antibody (Center) (Ascites) -**Protocols**

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

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

Blocking/Dilution buffer: 5% NFDM/TBST."

# CAT Antibody (Center) (Ascites) -**Background**

This gene encodes catalase, a key antioxidant enzvme in

the bodies defense against oxidative stress. Catalase is 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.

# CAT Antibody (Center) (Ascites) -References

Banerjee, M., et al. Toxicol. Appl. Pharmacol. 249(1):47-54(2010)

Wu, S.H., et al. Clin. Chim. Acta 411 (21-22), 1705-1710 (2010):

Liu, L., et al. J. Invest. Dermatol.

130(11):2647-2653(2010) Bailey, S.D., et al. Diabetes Care

33(10):2250-2253(2010)

Dutkiewicz, G., et al. Nephrology (Carlton)

15(5):587-591(2010)

# **CAT Antibody (Center) (Ascites) - Citations**

 Inhibition of p38 MAPK sensitizes tumour cells to cisplatin-induced apoptosis mediated by reactive oxygen species and JNK.