Anti-Catalase Antibody

ER40125

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 60 kDa

Description: Hydrogen peroxide is a harmful byproduct of many normal metabolic processes; to prevent damage to cells and tissues, it must be quickly converted into other, less dangerous substances. To this end, catalase is frequently used by cells to rapidly catalyze the decomposition of hydrogen peroxide into less-reactive gaseous oxygen and water molecules. Catalase is usually located in a cellular, bipolar environment organelle called the peroxisome. All known animals use catalase in every organ, with particularly high concentrations occurring in the liver. Catalase promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells.

Immunogen: Synthetic peptide within C-terminal human Catalase.

Positive control: F9 cell lysate, A549 cell lysate, Mouse lung tissue lysate, Mouse liver tissue lysate, Human lung tissue lysate, Hela cell lysate, human liver tissue, rat kidney tissue, rat liver tissue, rat lung tissue, mouse liver tissue, mouse kidney tissue.

Subcellular location: Peroxisome.

Database links: SwissProt: P04040 Human | P24270 Mouse | P04762 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

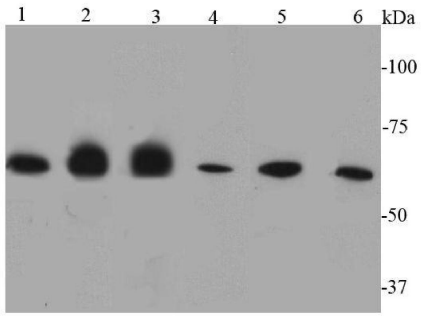

Fig1: Western blot analysis of Caveolin-1 on different lysates using anti-Caveolin-1 antibody at 1/500 dilution.
Positive control:
Lane 1: F9 cell lysate
Lane 2: A549 cell lysate
Lane 3: Mouse lung tissue lysate
Lane 4: Mouse liver tissue lysate
Lane 5: Human lung tissue lysate
Lane 6: Hela cell lysate

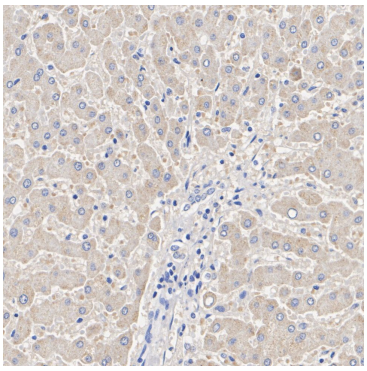

Fig2: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-Catalase antibody (ER40125) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ER40125) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

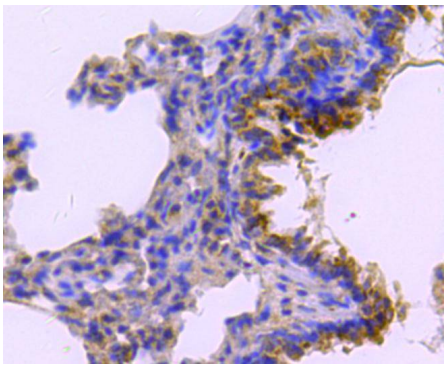

Fig3: Immunohistochemical analysis of paraffin-embedded rat lung tissue using anti-catalase antibody. Counter stained with hematoxylin.

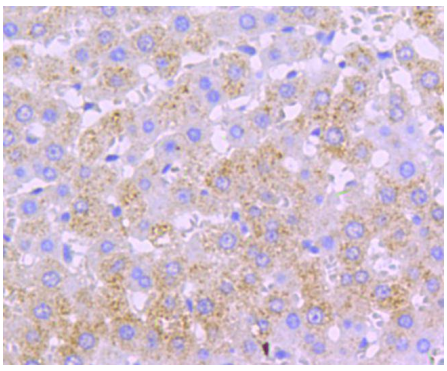

Fig4: Immunohistochemical analysis of paraffin-embedded rat liver tissue using anti-catalase antibody. Counter stained with hematoxylin.

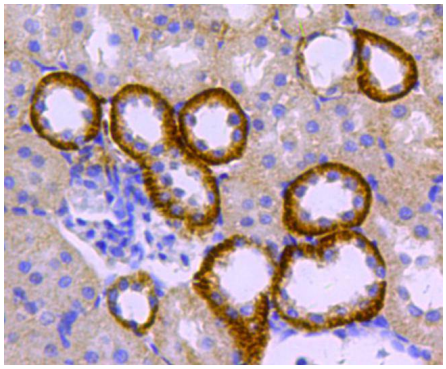

Fig5: Immunohistochemical analysis of paraffin-embedded rat kidney tissue using anti-catalase antibody. Counter stained with hematoxylin.

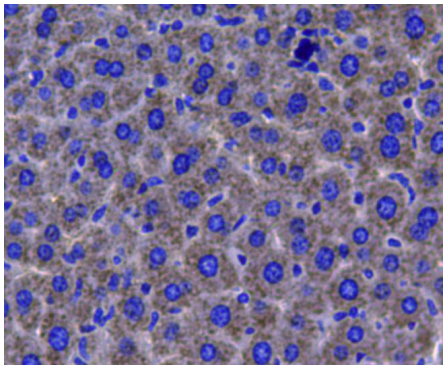

Fig6: Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-catalase antibody. Counter stained with hematoxylin.

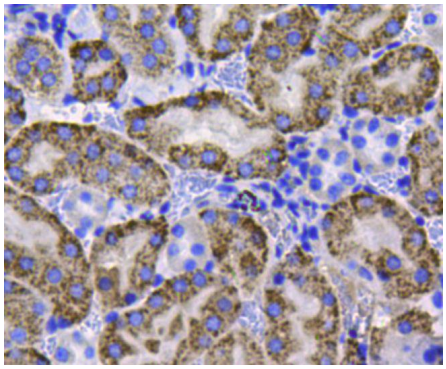

Fig7: Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-catalase antibody. Counter stained with hematoxylin.

Background References

1. Amo T, Atomi H, Imanaka T (June 2002). "Unique presence of a manganese catalase in a hyperthermophilic archaeon, Pyrobaculum calidifontis VA1". J. Bacteriol. 184 (12): 3305–3312.
2. Ho YS, Xiong Y, Ma W, Spector A, Ho D (2004). "Mice Lacking Catalase Develop Normally but Show Differential Sensitivity to Oxidant Tissue Injury". J Biol Chem 279 (31): 32804–32812.