

Anti-Catalase Antibody

Rabbit Polyclonal Antibody
Catalog # ABV12042

Product Information

Application	WB
Primary Accession	P04040
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	N/A
Calculated MW	59756

Additional Information

Gene ID	847
Application & Usage	WB: Jurkat, 3T3, HepG2 cell lysates, human catalase
Other Names	CAT
Target/Specificity	Catalase
Antibody Form	Liquid
Appearance	Colorless liquid
Formulation	In PBS pH 7.2, containing 30% glycerol, 0.5% BSA, 5 mM EDTA and 0.03% proclin
Handling	The antibody solution should be gently mixed before use.
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-Catalase Antibody 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](#)).

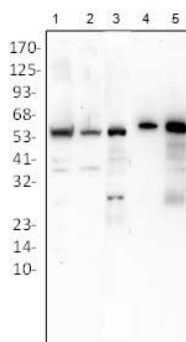
Cellular Location

Peroxisome matrix

Background

Catalase protein 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. Catalase is a key antioxidant enzyme in the body's 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.

Images



Western blot analysis of catalase antibody in: Lane 1: Jurkat cell lysate Lane 2: 3T3 cell lysate Lane 3: HepG2 cell lysate Lane 4: human catalase 2 ng Lane 5: human catalase 10 ng

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.