

Datasheet for ABIN2717106

anti-Catalase antibody[Go to Product page](#)**3** Images**1** Publication

Overview

Quantity:	0.1 mL
Target:	Catalase (CAT)
Reactivity:	Human, Rat, Dog, Monkey
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Catalase antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Full length human recombinant protein of human CAT (NP_111743) produced in HEK293T cell.
Clone:	1B6
Isotype:	IgG1
Characteristics:	Homo sapiens catalase (CAT)
Purification:	Purified from mouse ascites fluids by affinity chromatography

Target Details

Target:	Catalase (CAT)
Alternative Name:	CAT (CAT Products)
Background:	This gene encodes catalase, a key antioxidant enzyme in the bodies defense against oxidative stress. Catalase is a heme enzyme that is present in the peroxisome of nearly all aerobic cells.

Target Details

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.

Molecular Weight:	59.6 kDa
Gene ID:	847
NCBI Accession:	NM_001752
HGNC:	847
Pathways:	Cellular Glucan Metabolic Process , Cell RedoxHomeostasis , Photoperiodism

Application Details

Application Notes:	WB 1:200~500, IHC 1:150, IF 1:100,
Comment:	The concentration of the product may vary between diferrent lots.
Restrictions:	For Research Use only

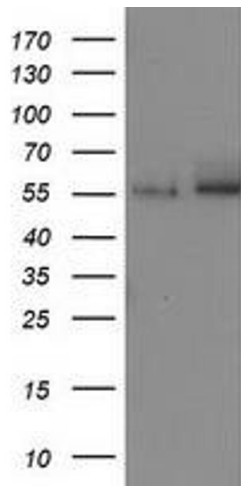
Handling

Format:	Liquid
Concentration:	0.5-1.0 mg/mL
Buffer:	PBS (PH 7.3) containing 1 % BSA, 50 % glycerol and 0.02 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Publications

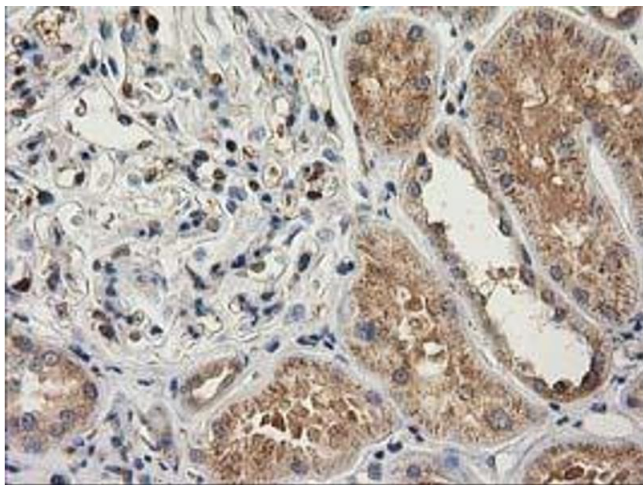
Product cited in:	Benlloch, Obrador, Valles, Rodriguez, Sirerol, Alcácer, Pellicer, Salvador, Cerdá, Sáez, Estrela: "Pterostilbene Decreases the Antioxidant Defenses of Aggressive Cancer Cells In Vivo: A Physiological Glucocorticoids- and Nrf2-Dependent Mechanism." in: Antioxidants & redox
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Images



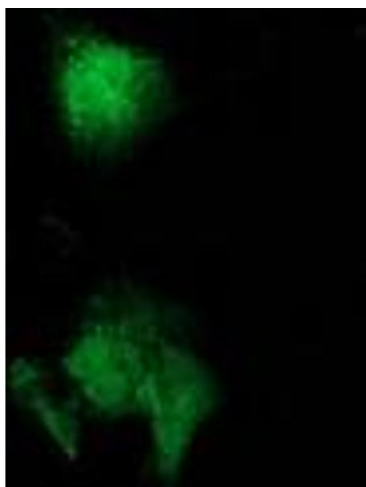
Western Blotting

Image 1. HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CAT (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 µg per lane) were separated by SDS-PAGE and immunoblotted with anti-CAT.



Immunohistochemistry

Image 2. Immunohistochemical staining of paraffin-embedded Human Kidney tissue using anti-CAT mouse monoclonal antibody. (ABIN2454281)



Immunofluorescence

Image 3. Anti-CAT mouse monoclonal antibody (ABIN2454281) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY CAT (RC210763).