

ARG42743 anti-Catalase antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Catalase
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Catalase
Species	Human
Immunogen	Recombinant protein corresponding to E344-L527 of Human Catalase.
Conjugation	Un-conjugated
Alternate Names	Catalase; EC 1.11.1.6

Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 57 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

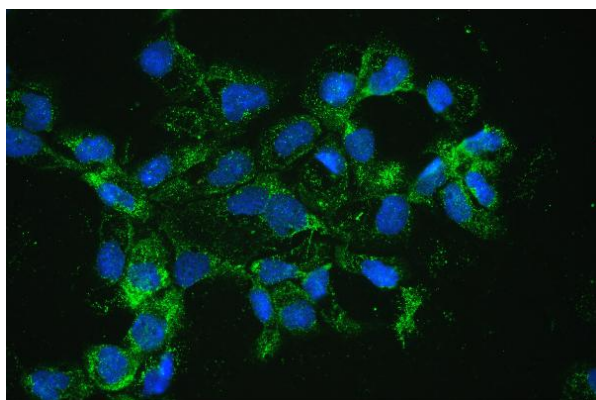
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

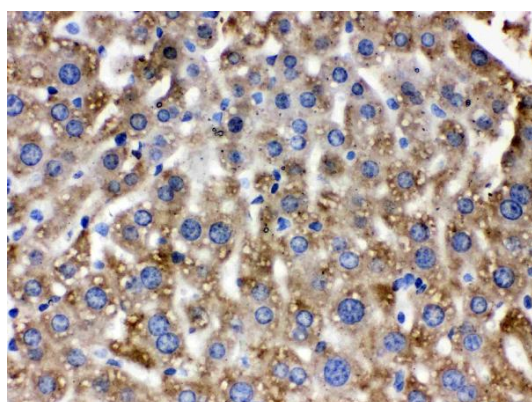
Gene Symbol	CAT
Gene Full Name	catalase
Background	This gene encodes catalase, a key antioxidant enzyme in the bodies defense against oxidative stress. Catalase is a heme enzyme that is present in the peroxisome of nearly all aerobic cells. Catalase converts the reactive oxygen species hydrogen peroxide 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. [provided by RefSeq, Oct 2009]
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. [UniProt]
Calculated Mw	60 kDa
PTM	The N-terminus is blocked. [UniProt]
Cellular Localization	Peroxisome. [UniProt]

Images



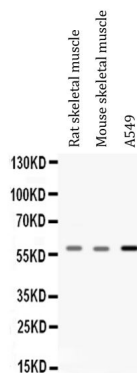
ARG42743 anti-Catalase antibody ICC/IF image

Immunofluorescence: A431 cells were blocked with 10% goat serum and then stained with ARG42743 anti-Catalase antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



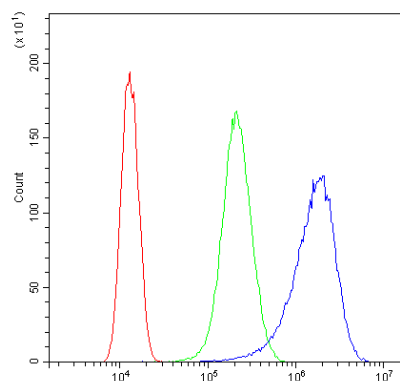
ARG42743 anti-Catalase antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse liver tissue stained with ARG42743 anti-Catalase antibody at 1 µg/ml dilution.



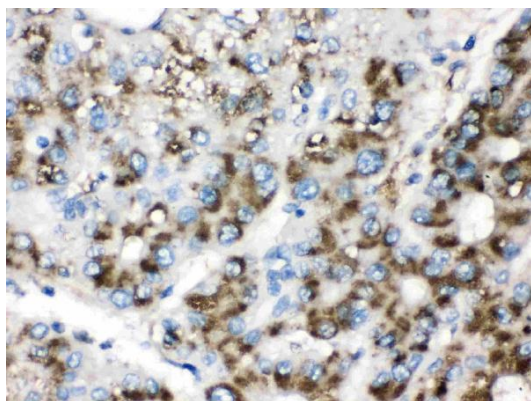
ARG42743 anti-Catalase antibody WB image

Western blot: Rat skeletal muscle, Mouse skeletal muscle and A549 whole cell lysates stained with ARG42743 anti-Catalase antibody at 0.5 µg/ml dilution.



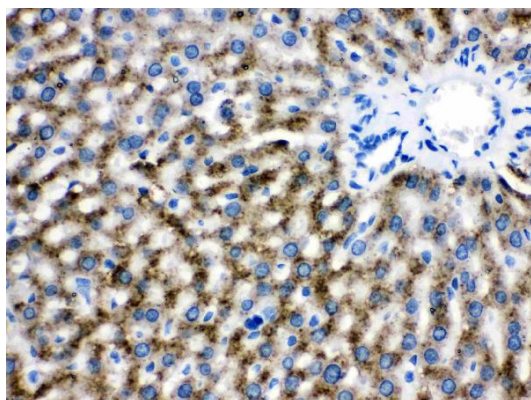
ARG42743 anti-Catalase antibody FACS image

Flow Cytometry: SiHa cells were blocked with 10% normal goat serum and then stained with ARG42743 anti-Catalase antibody (blue) at 1 µg/10⁶ cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 µg/10⁶ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



ARG42743 anti-Catalase antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver cancer tissue stained with ARG42743 anti-Catalase antibody at 1 µg/ml dilution.



ARG42743 anti-Catalase antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat liver tissue stained with ARG42743 anti-Catalase antibody at 1 µg/ml dilution.