

Goat Anti-Catalase / CAT Antibody

Peptide-affinity purified goat antibody Catalog # AF1195a

Specification

Goat Anti-Catalase / CAT Antibody - Product Information

Application IHC, WB Primary Accession P04040

Other Accession <u>NP_001743</u>, <u>847</u>, <u>12359 (mouse)</u>

Reactivity Human, Mouse,

Rat

Predicted Dog
Host Goat
Clonality Polyclonal
Concentration 0.5mg/ml

Isotype IgG Calculated MW 59756

Goat Anti-Catalase / CAT Antibody - Additional Information

Gene ID 847

Other Names

Catalase, 1.11.1.6, CAT

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

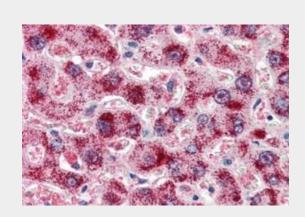
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-Catalase / CAT Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Catalase / CAT Antibody - Protein Information

Name CAT



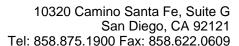
AF1195a (2 μg/ml) staining of paraffin embedded Human Liver. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

250kDa 150kDa 100kDa 75kDa 50kDa 37kDa 25kDa 20kDa 15kDa

AF1195a (1 μ g/ml) staining of Human Kidney lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Catalase / CAT Antibody - 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





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.

Goat Anti-Catalase / CAT Antibody - Protocols

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

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

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.

Goat Anti-Catalase / CAT Antibody - References

The association of -262C/T polymorphism in the catalase gene and delayed graft function of kidney allografts. Dutkiewicz G, et al. Nephrology (Carlton), 2010 Aug. PMID 20649881. Epistasis of oxidative stress-related enzyme genes on modulating the risks in oral cavity cancer. Wu SH, et al. Clin Chim Acta, 2010 Nov 11. PMID 20643115. Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Promoter Variant in the Catalase Gene Is Associated with Vitiligo in Chinese People. Liu L, et al. | Invest Dermatol, 2010 Jul 8. PMID 20613769. [Effects of catalase gene (RS769217) polymorphism on energy homeostasis and bone status are gender specific] Vitai M, et al. Orv Hetil, 2010 Jun 6. PMID 20494887.