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Goat Anti-CYBB / GP91-PHOX Antibody
Peptide-affinity purified goat antibody
Catalog # AF1288a

Specification

Goat Anti-CYBB / GP91-PHOX Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P04839
Other Accession	NP_000388, 1536
Reactivity	**Human**
Predicted	**Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**65336**

Goat Anti-CYBB / GP91-PHOX Antibody - Additional Information

Gene ID 1536

Other Names
Cytochrome b-245 heavy chain, 1.-.-.-, CGD91-phox, Cytochrome b(558) subunit beta, Cytochrome b558 subunit beta, Heme-binding membrane glycoprotein gp91phox, NADPH oxidase 2, Neutrophil cytochrome b 91 kDa polypeptide, Superoxide-generating NADPH oxidase heavy chain subunit, gp91-1, gp91-phox, p22 phagocyte B-cytochrome, CYBB, NOX2

Format
0.5 mg IgG/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-CYBB / GP91-PHOX Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CYBB / GP91-PHOX Antibody - Protein Information

Name CYBB (HGNC:2578)

Synonyms NOX2

Function
Critical component of the membrane-bound oxidase of phagocytes that generates superoxide. It is

the terminal component of a respiratory chain that transfers single electrons from cytoplasmic NADPH across the plasma membrane to molecular oxygen on the exterior. Also functions as a voltage-gated proton channel that mediates the H(+) currents of resting phagocytes. It participates in the regulation of cellular pH and is blocked by zinc.

Cellular Location
Cell membrane; Multi-pass membrane protein. Note=As unassembled monomer may localize to the endoplasmic reticulum

Tissue Location
Detected in neutrophils (at protein level).

Goat Anti-CYBB / GP91-PHOX Antibody - Protocols

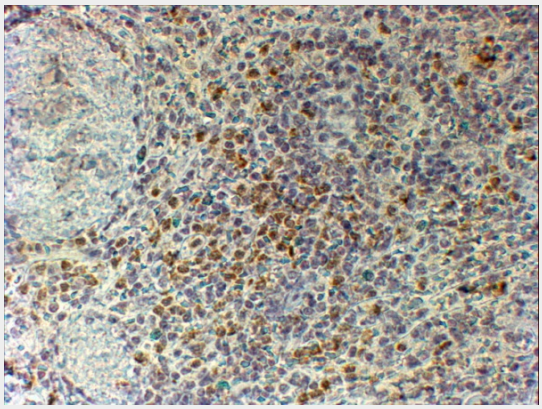
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-CYBB / GP91-PHOX Antibody - Images



AF1288a (0.03 µg/ml) staining of Human Peripheral Blood Mononucleocytes lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1288a (2µg/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

Goat Anti-CYBB / GP91-PHOX Antibody - Background

Cytochrome b (-245) is composed of cytochrome b alpha (CYBA) and beta (CYBB) chain. It has been proposed as a primary component of the microbicidal oxidase system of phagocytes. CYBB deficiency is one of five described biochemical defects associated with chronic granulomatous disease (CGD). In this disorder, there is decreased activity of phagocyte NADPH oxidase; neutrophils are able to phagocytize bacteria but cannot kill them in the phagocytic vacuoles. The cause of the killing defect is an inability to increase the cell's respiration and consequent failure to deliver activated oxygen into the phagocytic vacuole.

Goat Anti-CYBB / GP91-PHOX Antibody - References

New p22-phox monoclonal antibodies: identification of a conformational probe for cytochrome b 558. Campion Y, et al. J Innate Immun, 2009 Oct. PMID 20375611.
Genetic risk factors for hepatopulmonary syndrome in patients with advanced liver disease. Roberts KE, et al. Gastroenterology, 2010 Jul. PMID 20346360.
iPLA2, a novel determinant in Ca2+- and phosphorylation-dependent S100A8/A9 regulated NOX2 activity. Schenten V, et al. Biochim Biophys Acta, 2010 Jul. PMID 20219570.
Polymorphisms in innate immunity genes and patients response to dendritic cell-based HIV immuno-treatment. Segat L, et al. Vaccine, 2010 Mar 2. PMID 20056178.
Regulation of phagocyte NADPH oxidase by hydrogen peroxide through a Ca(2+)/c-Abl signaling pathway. El Jamali A, et al. Free Radic Biol Med, 2010 Mar 15. PMID 20043988.