



gp91-phox Monoclonal Antibody

Catalog No	YP-mAb-02867
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CYBB
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human CYBB. AA range:111-160
Specificity	gp91-phox Monoclonal Antibody detects endogenous levels of gp91-phox protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CYBB;CGD;CGD91-phox;Cytochrome b-245 heavy chain;gp91-phox;NOX2; Cytochrome b(558) subunit beta;Cytochrome b558 subunit beta;Heme-binding membrane glycoprotein gp91phox;NADPH oxidase 2Neutrophil cytochrome b 91 kDa polypeptide;Superoxide-generating NADPH oxidase heavy chain subunit; gp91-1;p22 phagocyte B-cytochrome
Observed Band	70kD
Calculated Molecular Weight	70kD
Cell Pathway	Cell membrane; Multi-pass membrane protein. As unassembled monomer may localize to the endoplasmic reticulum. .
Tissue Specificity	Detected in neutrophils (at protein level).
Function	cofactor:FAD.,disease:Defects in CYBB are a cause of chronic granulomatous disease X-linked (XCGD) [MIM:306400]. Chronic granulomatous disease is a genetically heterogeneous disorder characterized by the inability of neutrophils and phagocytes to kill microbes that they have ingested. Patients suffer from life-threatening bacterial/fungal infections.,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.,online information:CYBB deficiency database, PTM:Glycosylated.,similarity:Contains 1 FAD-binding FR-t

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. [provided by RefSeq, Jul 2008],

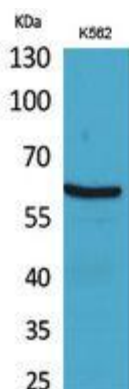
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using gp91-phox Monoclonal Antibody