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Rabbit Anti-Cytochrome b245 Light Chain antibody

SL3879R

Product Name:	Cytochrome b245 Light Chain
Chinese Name:	
Alias:	CYBA; Cytochrome b 245 alpha polypeptide; Cytochrome b 245 light chain; Cytochrome b alpha polypeptide; Cytochrome b(558) alpha chain; Cytochrome b(558) alpha subunit; Cytochrome b558 subunit alpha; Flavocytochrome b 558 alpha polypeptide; Neutrophil cytochrome b 22 kDa polypeptide; p22 phagocyte B- cytochrome; CY24A_HUMAN; p22-phox; p22phox; Superoxide-generating NADPH oxidase light chain subunit; p22-PHOX.
	Constitution (A) CL 2070D has been referenced in A multi-actions
	Specific References(4) SL3879R has been referenced in 4 publications.
	[IF=3.73]Walton, Noah M., et al. "Adult neurogenesis transiently generates oxidative
	stress." PloS one 7.4 (2012): e35264.IHC-F;Mouse.
	PubMed:22558133
	[IF=2.99]Li, A., et al. "Arctigenin suppresses transforming growth factor- β 1-induced
文献引用	expression of monocyte chemoattractant protein-1 and the subsequent epithelial-
Pub	mesenchymal transition through reactive oxygen species-dependent ERK/NF- κ B
Pub Mea	signaling pathway in renal tubular epithelial cells." Free Radical Research (2015): 1-
	19.other;
	<u>PubMed:25968940</u>
	[IF=2.86]Yue, Long, et al. "Bletilla striata polysaccharide inhibits angiotensin II-
	induced ROS and inflammation via NOX4 and TLR2 pathways." International Journal
	of Biological Macromolecules (2016).WB;Human.
	PubMed:27151672

	[IF=1.72] Yoshida, Toshinori, et al. "Apocynin and enzymatically modified isoquercitrin
	suppress the expression of a NADPH oxidase subunit p22phox in steatosis-related
	preneoplastic liver foci of rats." Experimental and Toxicologic Pathology (2016).IHC-
	P;Rat_
	PubMed:27789131
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-
Applications:	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	21kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CK18 Cytochrome b245 Light Chain/p22phox:21-120/195
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Mox1 and the glycoprotein gp91-phox are largely related proteins that are essential components of the NADPH oxidase. The superoxide-generating NADPH oxidase is present in phagocytes, neuroepithelial bodies, vascular smooth muscle cells and endothelial cells. It includes a membrane-bound flavocytochrome containing two subunits, gp91-phox and p22-phox, and the cytosolic proteins p47-phox and p67-phox. During activation of the NADPH oxidase, p47-phox and p67-phox migrate to the plasma membrane, where they associate with the flavocytochrome cytochrome b558 to form the active enzyme complex. The p22- and gp91-phox subunits also function as surface O2 sensors that initiate cellular signaling in response to hypoxic conditions. Function: Critical component of the membrane-bound oxidase of phagocytes that generates superoxide. Associates with NOX3 to form a functional NADPH oxidase constitutively generating superoxide.
	Subunit: Composed of a heavy chain (beta) and a light chain (alpha). Interacts with SH3PXD2A

(By similarity). Interacts with DUOX1, DUOX2 and TPO. Interacts with NOX3 and NOX4. Interacts with calprotectin (S100A8/9).

Subcellular Location: Cell Membrane

Post-translational modifications:

The heme prosthetic group could be coordinated with residues of the light chain, the heavy chain, or both, and it is possible that more than one heme is present per cytochrome b-245. [PTM] Phosphorylation at Thr-147 enhances NADPH oxidase activity by promoting p47phox binding (By similarity).

DISEASE:

Granulomatous disease, chronic, cytochrome-b-negative, autosomal recessive (ARCGD) [MIM:233690]: A disorder characterized by the inability of neutrophils and phagocytes to kill microbes that they have ingested. Patients suffer from life-threatening bacterial/fungal infections. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the p22phox family.

SWISS: P13498

Gene ID: 1535

Database links:

Entrez Gene: 1535 Human

Entrez Gene: 13057 Mouse

Entrez Gene: 79129 Rat

<u>Omim: 608508</u> Human

SwissProt: P13498 Human

SwissProt: Q61462 Mouse

SwissProt: Q62737 Rat

Unigene: 513803 Human

	Important Note:
	This product as supplied is intended for research use only, not for use in human,
	therapeutic or diagnostic applications.
	p22phox又称中性粒细胞色素b22kDa的多肽,主要用于Cardiovascular病及心肺功能
	的研究。
Picture:	Tissue/cell: human liver carcinoma; 4% Paraformaldehyde-fixed and paraffin- embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-CYBA Polyelonal Antibody, Unconjugated(SL3879R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

