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gp91-phox Polyclonal Antibody

Catalog # AP73566

Product Information

Application	WB, IHC-P
Primary Accession	P04839
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65336

Additional Information

Gene ID	1536
Other Names	CYBB; NOX2; Cytochrome b-245 heavy chain; CGD91-phox; 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; gp91-phox; p22 phagocyte B-cytochrome
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

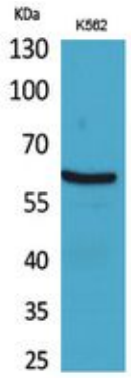
Name	CYBB (HGNC:2578)
Synonyms	NOX2
Function	Catalytic subunit of the phagocyte NADPH oxidase complex that mediates the transfer of electrons from cytosolic NADPH to O2 to produce the superoxide anion (O2(-)) (PubMed:15338276, PubMed:36241643, PubMed:36413210, PubMed:38355798). In the activated complex, electrons are first transferred from NADPH to flavin adenine dinucleotide (FAD) and subsequently transferred via two heme molecules to molecular oxygen, producing superoxide through an outer-sphere reaction (Probable) (PubMed:38355798). Activation of the NADPH oxidase complex is initiated by the assembly of cytosolic subunits of the NADPH oxidase complex with the core NADPH oxidase complex to form a complex at the plasma membrane or phagosomal membrane (PubMed:19028840, PubMed:38355798). This activation process is initiated by phosphorylation dependent binding of the

	cytosolic NCF1/p47-phox subunit to the C-terminus of CYBA/p22-phox (By similarity). NADPH oxidase complex assembly is impaired through interaction with NRROS (By similarity).
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).

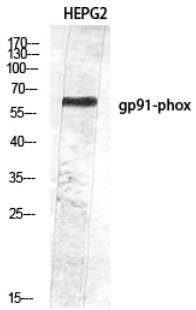
Background

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.

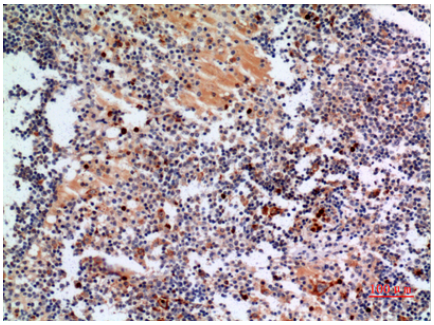
Images



Western Blot analysis of K562 cells using gp91-phox Polyclonal Antibody. Antibody was diluted at 1:2000. Secondary antibody was diluted at 1:20000



Western Blot analysis of HEPG2 using gp91-phox Polyclonal Antibody diluted at 1：2000. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-lymph-gland, antibody was diluted at 1:100

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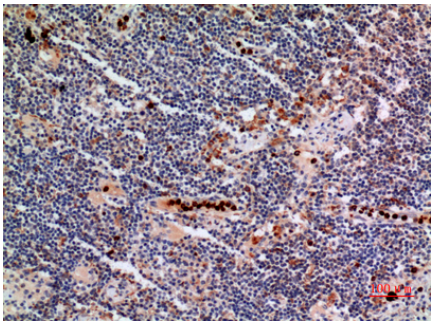
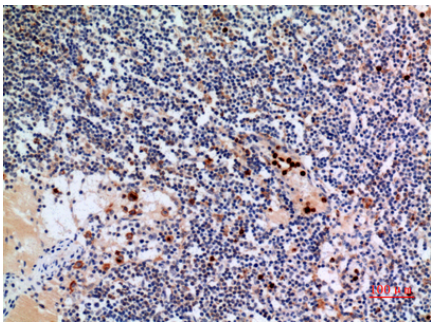
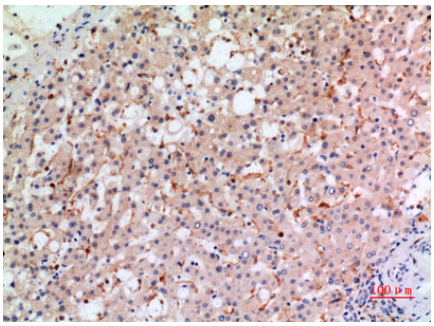
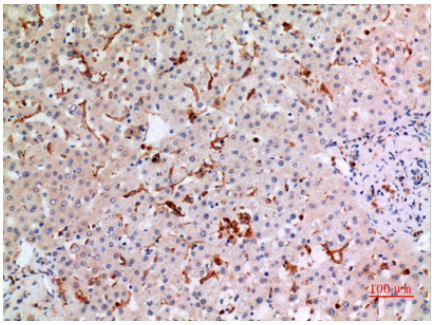




Immunohistochemical analysis of paraffin-embedded human-lymph-gland, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:100