

NOX2/CYBB/gp91phox Antibody
Rabbit mAb
Catalog # AP90740**Specification****NOX2/CYBB/gp91phox Antibody - Product Information**

Application	WB
Primary Accession	P04839
Reactivity	Rat
Clonality	Monoclonal

Other Names

CGD; CGD91-phox; Cytochrome b-245 heavy chain; CGD91-phox; Cytochrome b558 subunit beta; Heme-binding membrane glycoprotein; NADPH oxidase 2; Neutrophil cytochrome b 91 kDa polypeptide;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	65336 Da

NOX2/CYBB/gp91phox Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human NOX2/CYBB/gp91phox
Description	The superoxide-generating NADPH oxidase complex expresses in phagocytes, neuroepithelial bodies, vascular smooth muscle cells, and endothelial cells. 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

NOX2/CYBB/gp91phox Antibody - 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:<a

[36241643](http://www.uniprot.org/citations/36241643), PubMed: [36413210](http://www.uniprot.org/citations/36413210), PubMed: [38355798](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/19028840), PubMed: [38355798](http://www.uniprot.org/citations/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

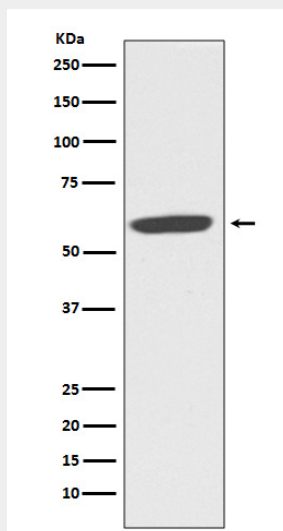
Detected in neutrophils (at protein level).

NOX2/CYBB/gp91phox 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 Cytometry](#)
- [Cell Culture](#)

NOX2/CYBB/gp91phox Antibody - Images



Western blot analysis of NOX2/CYBB/gp91phox expression in MCF-7 cell lysate.