10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

href="http://www.uniprot.org/citations/36241643" target="_blank">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

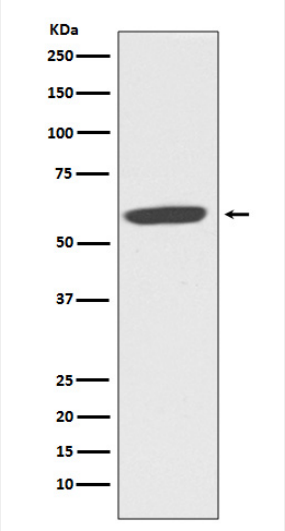
Tissue Location
Detected in neutrophils (at protein level).

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 Cytomety
- Cell Culture

NOX2/CYBB/gp91phox Antibody - Images



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