

**gp91-phox Polyclonal Antibody**  
**Catalog # AP70127****Specification**

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**gp91-phox Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P04839</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**gp91-phox Polyclonal Antibody - 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 2; Neutrophil cytochrome b 91 kDa polypeptide; Superoxide-generat

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**gp91-phox Polyclonal 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 O<sub>2</sub> to produce the superoxide anion (O<sub>2</sub><sup>-</sup>) (PubMed:<a href="http://www.uniprot.org/citations/15338276" target="\_blank">15338276</a>, PubMed:<a href="http://www.uniprot.org/citations/36241643" target="\_blank">36241643</a>, PubMed:<a href="http://www.uniprot.org/citations/36413210" target="\_blank">36413210</a>, PubMed:<a href="http://www.uniprot.org/citations/38355798" target="\_blank">38355798</a>). 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:<a href="http://www.uniprot.org/citations/38355798" target="\_blank">38355798</a>). 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:<a href="http://www.uniprot.org/citations/19028840" target="\_blank">19028840</a>, PubMed:<a href="http://www.uniprot.org/citations/38355798" target="\_blank">38355798</a>). 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

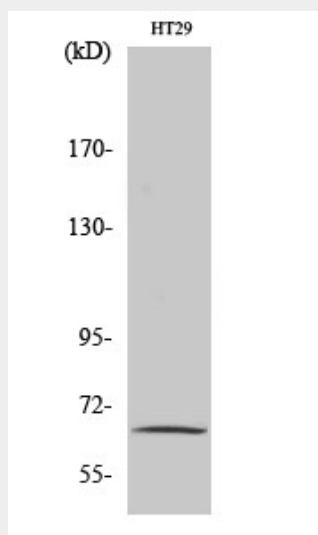
Detected in neutrophils (at protein level).

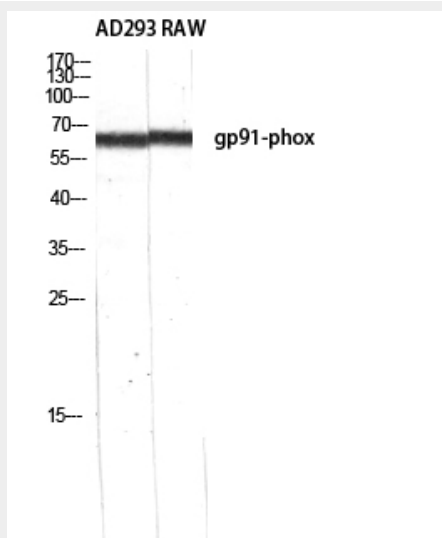
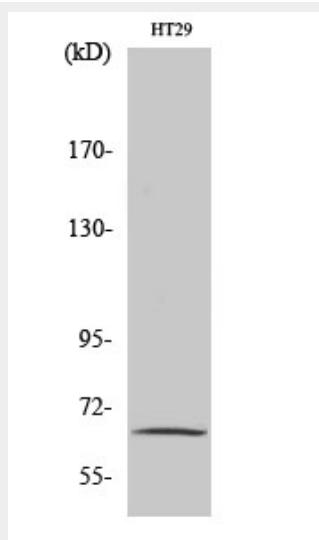
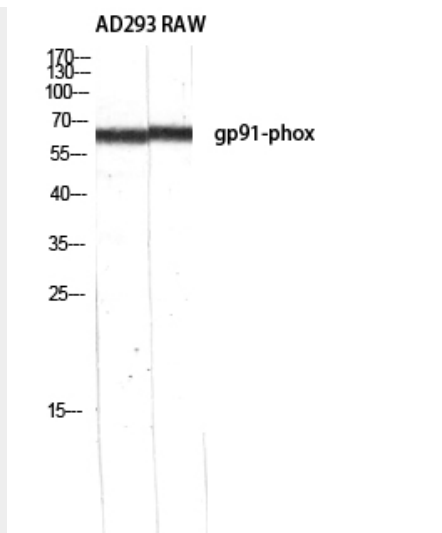
### gp91-phox Polyclonal Antibody - Protocols

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](#)

### gp91-phox Polyclonal Antibody - Images





**gp91-phox Polyclonal Antibody - 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.