

## Datasheet for ABIN5692996 anti-CYBB antibody (AA 416-500)



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### Overview

Quantity:	100 µg
Target:	CYBB
Binding Specificity:	AA 416-500
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA

### Product Details

Immunogen:	E. coli-derived human NOX2/gp91phox recombinant protein (Position: F416-D500).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for NOX2/gp91phox detection. Tested with WB, Direct ELISA in Human, Mouse, Rat.

### Target Details

Target:	CYBB
Alternative Name:	CYBB ( <a href="#">CYBB Products</a> )
Background:	Synonyms: 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-generating NADPH oxidase heavy chain subunit, gp91-1, gp91-phox, p22 phagocyte B-cytochrome, CYBB, NOX2

## Target Details

Tissue Specificity: Detected in neutrophils (at protein level).

Background: NOX2(NADPH OXIDASE 2), also called CYBB(CYTOCHROME b(-245), BETA SUBUNIT), p91-PHOX or GP91-1, is a human gene encoding a glycoprotein. NOX2 is an essential component of phagocytic NADPH-oxidase, a membrane-bound enzyme complex that generates large quantities of microbicidal superoxide and other oxidants upon activation. It is mapped on Xp11.4. NOX2 assembled on DC phagosomes in a gp91-phox subunit-dependent manner, and that reactive oxygen species were produced in a more sustained manner in immature DC phagosomes than in macrophage phagosomes. As a major player in innate immune responses in neutrophils, NOX2 is also involved in adaptive immunity through its activity in DCs. In heart cells, physiologic stretch rapidly activates reduced-form NOX2 to produce reactive oxygen species (ROS) in a process dependent on microtubules (X-ROS signaling).

UniProt: [P04839](#)

## Application Details

Application Notes: Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.  
Application Details: Western blot, 0.1-0.5 µg/mL  
Direct ELISA, 0.1-0.5 µg/mL

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg NaN<sub>3</sub>.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

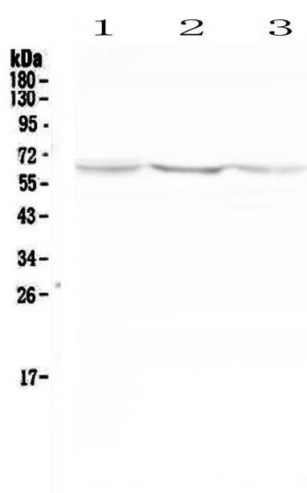
Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

## Publications

Product cited in: Liu, Kuang, Wu, Jin, Sun: "A novel polysaccharide from *Sargassum integerrimum* induces apoptosis in A549 cells and prevents angiogenesis in vitro and in vivo." in: **Scientific reports**, Vol. 6, pp. 26722, (2018) ([PubMed](#)).

Wu, You, Ma, Li, Yuan, Li, Ye, Liu, Yao, Chen, Lai, Yang: "Role of transient receptor potential ion channels and evoked levels of neuropeptides in a formaldehyde-induced model of asthma in BALB/c mice." in: **PLoS ONE**, Vol. 8, Issue 5, pp. e62827, (2013) ([PubMed](#)).

## Images



### Western Blotting

**Image 1.** Western blot analysis of NOX2 using anti-NOX2 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human U-87MG cell lysate, Lane 2: human Hela cell lysate, Lane 3: human HepG2 cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NOX2 antigen affinity purified polyclonal antibody (Catalog # ) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NOX2 at approximately 65KD. The expected band size for NOX2 is at 65KD.