Overview

Product name: Anti-NOX2/gp91phox antibody [EPR6991]  
Description: Rabbit monoclonal [EPR6991] to NOX2/gp91phox  
Host species: Rabbit  
Tested applications: Suitable for: WB  
Unsuitable for: Flow Cyt, ICC/IF or IHC-P  
Species reactivity: Reacts with: Mouse, Rat, Human  
Immunogen: Synthetic peptide within Human NOX2/gp91phox aa 150-250. The exact sequence is proprietary.  
Positive control: WB: MCF-7, HepG2 and Caco-2 cell lysates, mouse and rat brain and spleen tissue lysates. General notes:

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

This product is a recombinant rabbit monoclonal antibody.

Properties

Form: Liquid  
Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.

Dissociation constant (K_D) = 2.70 x 10^{-10} M
Function
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.

Involvement in disease
Defects in CYBB are a cause of chronic granulomatous disease X-linked (XCGD) [MIM:306400]. Chronic granulomatous disease is a genetically heterogeneous disorder characterized by the inability of neutrophils and phagocytes to kill microbes that they have ingested. Patients suffer from life-threatening bacterial/fungal infections.

Sequence similarities
Contains 1 FAD-binding FR-type domain.
Contains 1 ferric oxidoreductase domain.

Post-translational modifications
Glycosylated.

Cellular localization
Membrane.

Images
All lanes: Anti-NOX2/gp91phox antibody [EPR6991] (ab129068) at 1/5000 dilution (purified)

Lane 1: MCF-7 (Human breast adenocarcinoma cell line) cell lysate
Lane 2: HepG2 (Human liver hepatocellular carcinoma cell line) cell lysate
Lane 3: Caco-2 (Human colorectal adenocarcinoma cell line) cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 65 kDa
Observed band size: 60 kDa

why is the actual band size different from the predicted?

Blocking and diluting buffer: 5% NFDM/TBST.

All lanes: Anti-NOX2/gp91phox antibody [EPR6991] (ab129068) at 1/5000 dilution (purified)

Lane 1: Mouse brain tissue lysate
Lane 2: Mouse spleen tissue lysate
Lane 3: Rat brain tissue lysate
Lane 4: Rat spleen tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 65 kDa
Observed band size: 60 kDa why is the actual band size different
from the predicted?

Blocking and diluting buffer: 5% NFDM/TBST.

**All lanes**: Anti-NOX2/gp91phox antibody [EPR6991] (ab129068) at 1/1000 dilution (unpurified)

- **Lane 1**: MCF-7 cell lysate
- **Lane 2**: HepG2 cell lysate
- **Lane 3**: Caco-2 cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size**: 65 kDa

**Observed band size**: 60 kDa

**why is the actual band size different from the predicted?**

**Equilibrium disassociation constant (K_D)**

Learn more about K_D

**Click here to learn more about K_D**

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**Please note**: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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- We investigate all quality concerns to ensure our products perform to the highest standards
If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

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