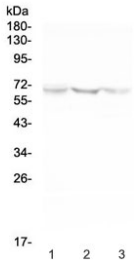
gp91phox Antibody / NOX2 / CYBB (RQ4016)

Catalog No.	Formulation	Size
RQ4016	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P04839
Applications	Western Blot : 0.5-1ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This gp91phox antibody is available for research use only.



Western blot testing of human 1) U-87 MG, 2) HeLa and 3) HepG2 cell lysate with NOX2 antibody at 0.5ug/ml. Predicted molecular weight ~65 kDa, can be observed at ~85 kDa.

Description

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).

Application Notes

Optimal dilution of the gp91phox antibody should be determined by the researcher.

Immunogen

A recombinant human partial protein corresponding to amino acids F416-D500 was used as the immunogen for the gp91phox antibody.

Storage

After reconstitution, the gp91phox antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.