ARG55310
anti-NOX2 / gp91phox antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NOX2 / gp91phox
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NOX2 / gp91phox
Species	Human
Immunogen	Recombinant protein of Human CYBB (NP_000388.2)
Conjugation	Un-conjugated
Alternate Names	Neutrophil cytochrome b 91 kDa polypeptide; gp91-phox; NADPH oxidase 2; Heme-binding membrane glycoprotein gp91phox; 558; CGD91-phox; gp91-1; EC 1.-.-.-; Cytochrome b; GP91-1; IMD34; CGD; GP91-PHOX; AMCBX2; GP91PHOX; NOX2; Cytochrome b-245 heavy chain; p22 phagocyte B-cytochrome; p91-PHOX; Superoxide-generating NADPH oxidase heavy chain subunit; Cytochrome b558 subunit beta

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: THP-1

Properties

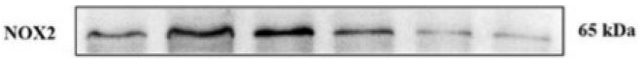
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

	cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 13058 Mouse GeneID: 1536 Human Swiss-port # P04839 Human Swiss-port # Q61093 Mouse
Gene Symbol	CYBB
Gene Full Name	cytochrome b-245, beta polypeptide
Background	Cytochrome b (-245) is composed of cytochrome b alpha (CYBA) and beta (CYBB) chain. It has been proposed as a primary component of the microbicidal oxidase system of phagocytes. CYBB deficiency is one of five described biochemical defects associated with chronic granulomatous disease (CGD). In this disorder, there is decreased activity of phagocyte NADPH oxidase; neutrophils are able to phagocytize bacteria but cannot kill them in the phagocytic vacuoles. The cause of the killing defect is an inability to increase the cell's respiration and consequent failure to deliver activated oxygen into the phagocytic vacuole. [provided by RefSeq, Jul 2008]
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. [UniProt]
Research Area	Cancer antibody; Immune System antibody; Metabolism antibody
Calculated Mw	65 kDa
PTM	Glycosylated. Phosphorylated on Ser and Thr residues.

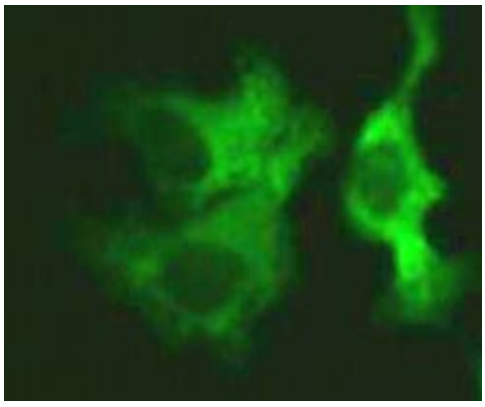
Images



ARG55310 anti-NOX2 / gp91phox antibody WB image

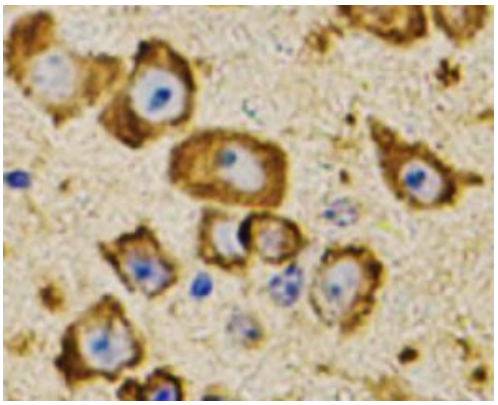
Western blot: HAECs stained with ARG55310 anti-NOX2 / gp91phox antibody.

From Qiang Wu et al. Pre-Print (2024), doi: 10.26599/FSHW.2024.9250032, Fig. 6. J.



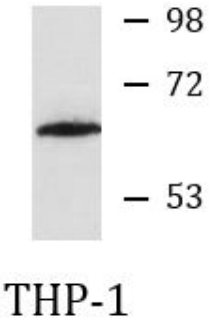
ARG55310 anti-NOX2 / gp91phox antibody ICC/IF image

Immunofluorescence: A431 cells stained with ARG55310 anti-NOX2 / gp91phox antibody at 1:100 dilution.



ARG55310 anti-NOX2 / gp91phox antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain stained with ARG55310 anti-NOX2 / gp91phox antibody at 1:100 dilution.



ARG55310 anti-NOX2 / gp91phox antibody WB image

Western blot: THP-1 cell lysate stained with ARG55310 anti-NOX2 / gp91phox antibody.