

For Research Use Only

# NOX2 Polyclonal antibody

Catalog Number: 19013-1-AP

Featured Product

199 Publications



## Basic Information

### Catalog Number:

19013-1-AP

### Size:

150ul, Concentration: 650 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5536

### GenBank Accession Number:

BC032720

### GeneID (NCBI):

1536

### UNIPROT ID:

P04839

### Full Name:

cytochrome b-245, beta polypeptide

### Calculated MW:

577 aa, 65 kDa

### Observed MW:

55 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:2000-1:8000

IHC: 1:500-1:2000

IF-P: 1:200-1:800

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF-P, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF, ColP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, rabbit, canine

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB: mouse spleen tissue, Jurkat cells, Raji cells, human plasma, rat spleen tissue

IHC: human tonsillitis tissue, mouse spleen tissue

IF-P: mouse spleen tissue, human tonsillitis tissue

FC (Intra): RAW 264.7 cells, MCF-7 cells

## Background Information

NOX2, also named as CYBB, CGD, 91-phox, gp91-1, gp91-phox, p22 phagocyte B-cytochrome, cytochrome b-245 and beta polypeptide, is a 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. This full length protein has three glycosylation sites. CYBB is found in human cardiomyocytes as multiple bands: the signal between 55 and 65 kDa is probably the unglycosylated protein, because the predicted molecular weight of unglycosylated CYBB protein is approximately 58 kDa (PMID: 17587483) to 65 kDa in phagocytes and the bands around 80 kDa probably represent glycosylated CYBB, as has also been shown in human umbilical vein endothelial cells (PMID: 12610097). In other reports, it also can be detected a band of 91 kDa (PMID: 19965781).

## Notable Publications

Author	Pubmed ID	Journal	Application
Zi-Chao Wang	36163178	Cell Death Dis	WB
Jingyu Song	31564534	J Sex Med	
Jing Li	31616516	Exp Ther Med	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

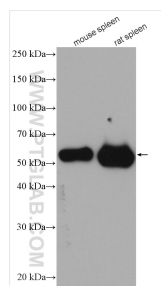
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

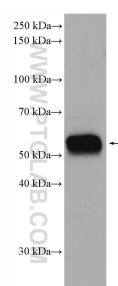
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

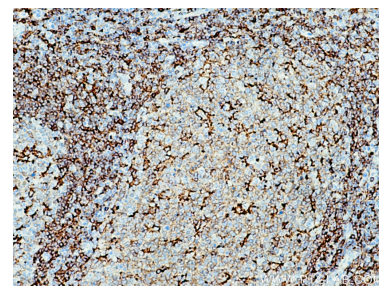
## Selected Validation Data



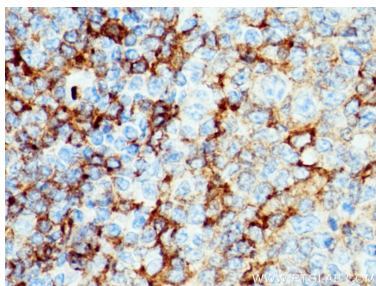
Various lysates were subjected to SDS PAGE followed by western blot with 19013-1-AP (NOX2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



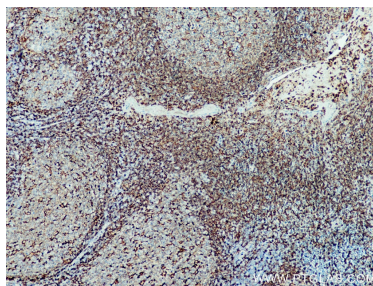
mouse spleen tissue were subjected to SDS PAGE followed by western blot with 19013-1-AP (NOX2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



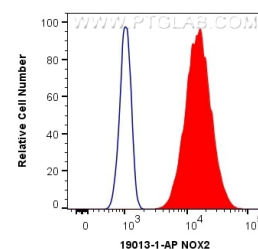
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19013-1-AP (NOX2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



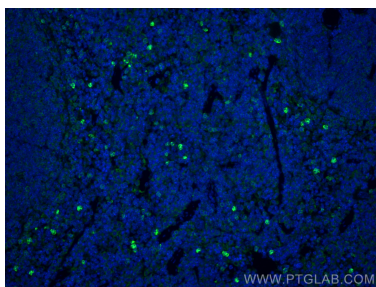
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19013-1-AP (NOX2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19013-1-AP (NOX2 antibody) at dilution of 1:1000 (under 4x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> RAW 264.7 cells were intracellularly stained with 0.4 ug Anti-Human NOX2 (19013-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using NOX2 antibody (19013-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).