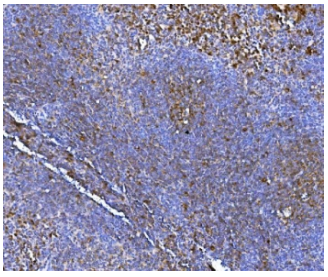
NOX2 Antibody/ gp91phox / CYBB (R30752)

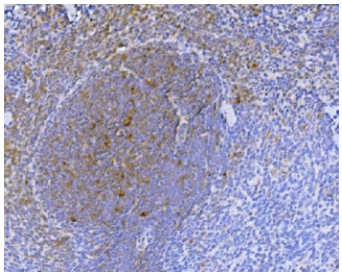
Catalog No.	Formulation	Size
R30752	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

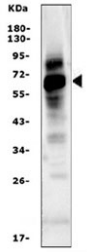
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P04839
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This NOX2 antibody is available for research use only.



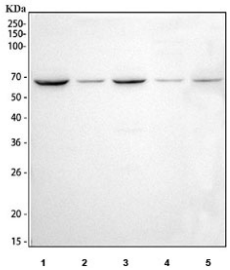
IHC staining of FFPE mouse spleen tissue with NOX2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



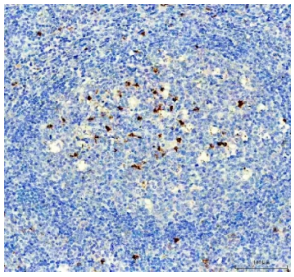
IHC staining of FFPE rat spleen tissue with NOX2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human U937 cell lysate with NOX2 antibody. Predicted molecular weight ~65 kDa, can be observed at ~85 kDa.



Western blot testing of 1) human Raji, 2) human Jurkat, 3) human MCF7, 4) rat RH35 and 5) mouse RAW264.7 cell lysate with NOX2 antibody. Predicted molecular weight ~65 kDa, can be observed at ~85 kDa.



IHC staining of FFPE human tonsil tissue with NOX2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

NADPH Oxidase 2, also called CYBB, p91-PHOX or GP91-1, 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. NOX2 assembled on DC phagosomes in a gp91-phox subunit-dependent manner, and 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, it 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

The stated application concentrations are suggested starting amounts. Titration of the NOX2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the middle region of human NOX2 (YWLCRDTHAFEWFADLLQ) was used as the immunogen for this NOX2 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the NOX2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.