

## Basic Information

Product Name	Anti-NOX1 Antibody	
Gene Name	NOX1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of rat NOX1, different from the related mouse sequence by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	65 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

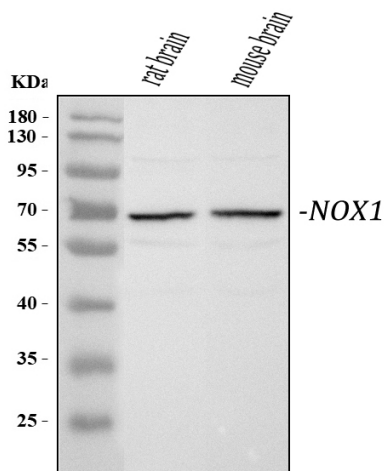
## Background Information

NOX1(NADPH OXIDASE 1), also known as NOH1, MOX1 or GP91-2, is an enzyme that in humans is encoded by the NOX1 gene. It is also a homolog of the catalytic subunit of the superoxide-generating NADPH oxidase of phagocytes, gp91phox. The NOX1 gene is mapped to Xq22.1. NOX1 was expressed in colon, prostate, uterus, and vascular smooth muscle, but not in peripheral blood leukocytes. The deduced 564-amino acid NOX1 protein, which is 58% identical to CYBB, contains 6 membrane-spanning regions, conserved flavin and pyridine nucleotide-binding sites, and histidines possibly involved in heme ligation. Overexpression of MOX1 in NIH 3T3 cells increased superoxide generation and cell growth. Cells expressing MOX1 had a transformed appearance, showed anchorage-independent growth, and produced tumors in athymic mice. Disruption of either Nox1 or Nox2 significantly delayed progression of motor neuron disease in these mice. However, 50% survival rates were enhanced significantly more by Nox2 deletion than Nox1 deletion.

## Reference

Anti-NOX1 Antibody被引用在13文献中。

## Selected Validation Data

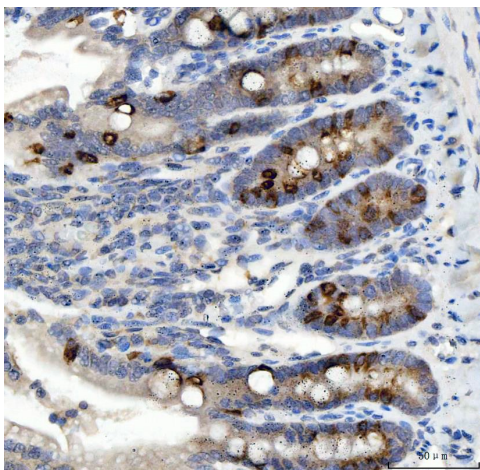


Western blot analysis of anti-NOX1 antibody (BA3720). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain whole cell lysates,

Lane 2: mouse brain whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-NOX1 antigen affinity purified polyclonal antibody (BA3720) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for NOX1 at approximately 65 kDa. The expected band size for NOX1 is at 65 kDa.



IHC analysis of NOX1 using anti-NOX1 antibody (BA3720).

NOX1 was detected in a paraffin-embedded section of rat colon tissue.

The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.