

Anti-NOXA1 Antibody
Catalog # ABO11233**Specification**

Anti-NOXA1 Antibody - Product Information

Application	WB
Primary Accession	Q86UR1
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for NADPH oxidase activator 1(NOXA1) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-NOXA1 Antibody - Additional Information

Gene ID 10811

Other Names

NADPH oxidase activator 1, NOX activator 1, Antigen NY-CO-31, NCF2-like protein, P67phox-like factor, p51-nox, NOXA1, P51NOX

Calculated MW

50933 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cytoplasm. Cell membrane. Translocation to membranes depends on NOXO1 or NCF1 and maybe RAC1.

Tissue Specificity

Widely expressed. Detected in pancreas, liver, kidney, spleen, prostate, small intestine and colon.

.

Protein Name

NADPH oxidase activator 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human NOXA1(176-195aa RQVPRGEVFRPHRWHLKHLE).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the NCF2/NOXA1 family.

Anti-NOXA1 Antibody - Protein Information

Name NOXA1

Synonyms P51NOX

Function

Functions as an activator of NOX1, a superoxide-producing NADPH oxidase. Functions in the production of reactive oxygen species (ROS) which participate in a variety of biological processes including host defense, hormone biosynthesis, oxygen sensing and signal transduction. May also activate CYBB/gp91phox and NOX3.

Cellular Location

Cytoplasm. Cell membrane. Note=Translocation to membranes depends on NOXO1 or NCF1 and maybe RAC1

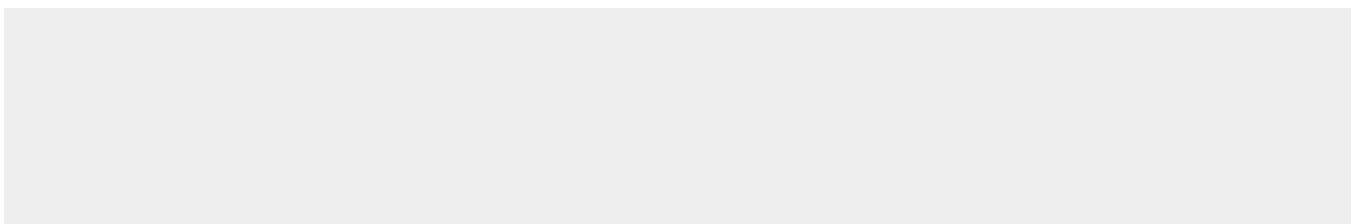
Tissue Location

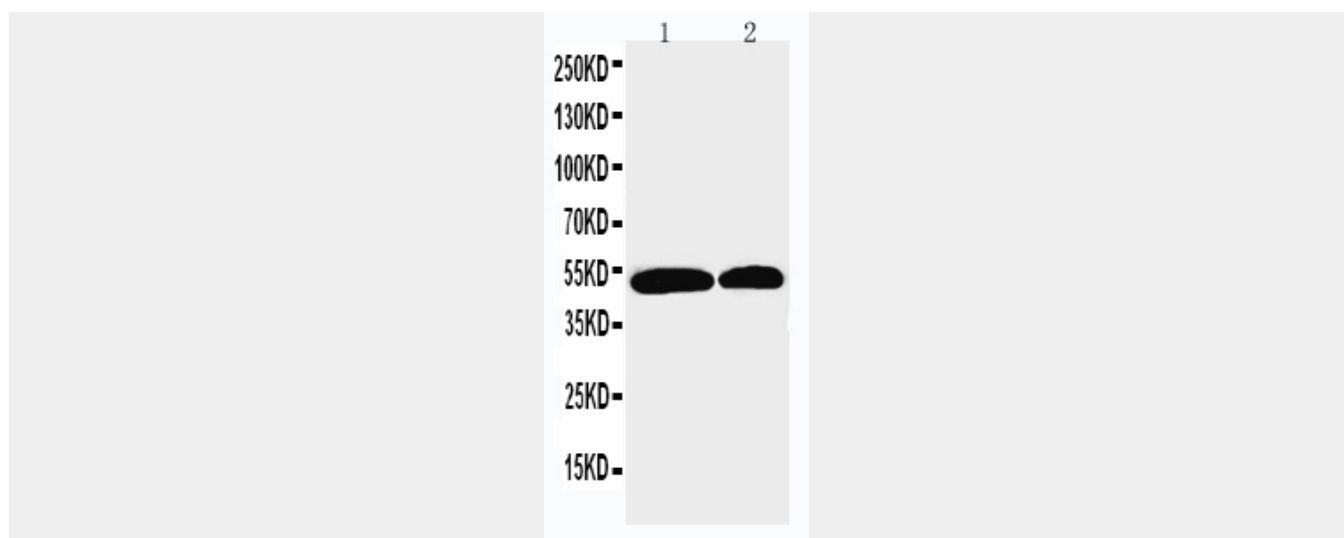
Widely expressed. Detected in pancreas, liver, kidney, spleen, prostate, small intestine and colon

Anti-NOXA1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-NOXA1 Antibody - Images



Anti-NOXA1 antibody, ABO11233, Western blotting
Lane 1: U87 Cell Lysate
Lane 2: HELA Cell Lysate

Anti-NOXA1 Antibody - Background

NOXA1(NADPH oxidase activator 1), also called NOX ACTIVATOR 1 or p51-NOX, is an enzyme that in humans is encoded by the NOXA1 gene. Hartz(2007) mapped the NOXA1 gene to chromosome 9q34.3 based on an alignment of the NOXA1 sequence with the genomic sequence(build 36.1). Banfi et al.(2003) mapped the mouse Noxa1 gene to chromosome 2. Using yeast 2-hybrid assays, Takeya et al.(2003) showed that human p51-NOX interacted with constitutively active forms of RAC1 and RAC2. In vitro binding assays revealed that p51-NOX bound GTP-bound RAC1, but not GDP-bound RAC1. p51-NOX also bound p47-PHOX(NCF1) and p41-NOX(NOXO1), and trp436 within the SH3 domain of p51-NOX was required for these interactions. Human cell lines or COS-7 cells cotransfected with p51-NOX and p41-NOX and either gp91-PHOX(CYBB) or NOX1 produced superoxide. Cells individually transfected with NOX1, p41-NOX, or p51-NOX and cells transfected with only p41-NOX and p51-NOX showed no superoxide production.