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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.
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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 r˚Constitution, 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 Cytomety
- Cell Culture

Anti-NOXA1 Antibody - Images

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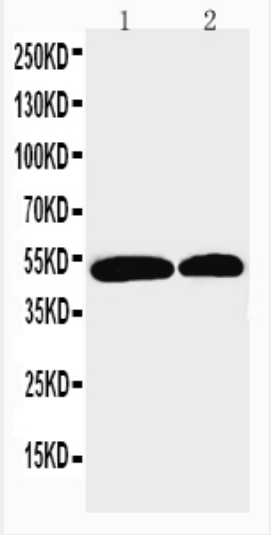

Anti-NOXA1 antibody, ABO11233, Western blottingLane 1: U87 Cell LysateLane 2: HELA Cell Lysate

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.