

# Anti-NOXA1 Antibody

Catalog # ABO11233

## Product Information

---

|                          |                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB                                                                                                      |
| <b>Primary Accession</b> | <a href="#">Q86UR1</a>                                                                                  |
| <b>Host</b>              | Rabbit                                                                                                  |
| <b>Reactivity</b>        | Human                                                                                                   |
| <b>Clonality</b>         | Polyclonal                                                                                              |
| <b>Format</b>            | Lyophilized                                                                                             |
| <b>Description</b>       | 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.

## Additional Information

---

|                                 |                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 10811                                                                                                                        |
| <b>Other Names</b>              | NADPH oxidase activator 1, NOX activator 1, Antigen NY-CO-31, NCF2-like protein, P67phox-like factor, p51-nox, NOXA1, P51NOX |
| <b>Calculated MW</b>            | 50933                                                                                                                        |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml, Human                                                                                           |
| <b>Subcellular Localization</b> | Cytoplasm. Cell membrane. Translocation to membranes depends on NOXO1 or NCF1 and maybe RAC1.                                |
| <b>Tissue Specificity</b>       | Widely expressed. Detected in pancreas, liver, kidney, spleen, prostate, small intestine and colon. .                        |
| <b>Source</b>                   | Eukaryota                                                                                                                    |
| <b>Protein Name</b>             | NADPH oxidase activator 1                                                                                                    |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.                                       |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence in the middle region of human NOXA1(176-195aa RQVPRGEVFRPHRWHLKHLE).         |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                 |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                      |
| <b>Storage</b>                  | At -20° C for one year. After reconstitution, at 4° C for one month. It can also                                             |

## Sequence Similarities

be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.  
Belongs to the NCF2/NOXA1 family.

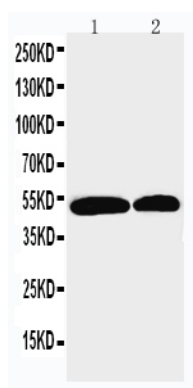
## Protein Information

|                          |                                                                                                                                                                                                                                                                                                                              |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | NOXA1                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>          | P51NOX                                                                                                                                                                                                                                                                                                                       |
| <b>Function</b>          | 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. |
| <b>Cellular Location</b> | Cytoplasm. Cell membrane. Note=Translocation to membranes depends on NOXO1 or NCF1 and maybe RAC1                                                                                                                                                                                                                            |
| <b>Tissue Location</b>   | Widely expressed. Detected in pancreas, liver, kidney, spleen, prostate, small intestine and colon                                                                                                                                                                                                                           |

## 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.

## Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.