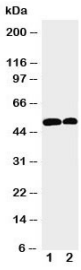
NOXA1 Antibody / NADPH oxidase activator 1 (R31030)

Catalog No.	Formulation	Size
R31030	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q86UR1
Applications	Western blot: 0.5-1ug/ml
Limitations	This NOXA1 antibody is available for research use only.



Western blot testing of NOXA1 antibody and Lane 1: U87; 2: HeLa cell lysate. Predicted/observed molecular weight ~51 kDa.

Description

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 gene to chromosome 9q34.3 based on an alignment of the protein sequence with the genomic sequence(build 36.1). Banfi et al.(2003) mapped the mouse gene to chromosome 2. Using yeast 2-hybrid assays, Takeya et al.(2003) showed that the human protein interacted with constitutively active forms of RAC1 and RAC2. In vitro binding assays revealed that NOXA1 bound GTP-bound RAC1, but not GDP-bound RAC1. It also bound p47-PHOX (NCF1) and p41-NOX (NOXO1), and trp436 within the SH3 domain of NOXA1 was required for these interactions. Human cell lines or COS-7 cells cotransfected with NOXA1/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.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the NOXA1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the middle region of human NADPH oxidase activator 1 (RQVPRGEVFRPHRWHLKHLE) was used as the immunogen for this NOXA1 antibody.

Storage

After reconstitution, the NOXA1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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