

Basic Information

Product Name	Anti-NOXA1 Antibody
Gene Name	NOXA1
Source	Rabbit
Isotype	IgG
Species Reactivity	human
Tested Application	WB
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human NOXA1(176-195aa RQVPRGEVFRPHRWHLKHLE).
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	51KD
Dilution Ratios	Western blot(WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

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.

Selected Validation Data

Lane 1: U87 Cell Lysate Lane 2: HELA Cell Lysate

