

10-7587: Monoclonal antibody to NOX4 (Clone: ABM51H8)

Clonality :	Monoclonal
Clone Name :	ABM51H8
Application :	IHC,WB
Reactivity :	Human
Gene :	NOX4
Gene ID :	50507
Uniprot ID :	Q9NPH5
Format :	Purified
Alternative Name :	NOX4,RENOX
Isotype :	Mouse IgG2b Kappa
Immunogen Information :	A partial length recombinant protein of NOX4 was used as the immunogen for this antibody.

Description

NOX4 (NADPH oxidase 4) is a member of the NADPH oxidase gene family that regulates cellular differentiation, innate immunity and tissue fibrosis. Unlike other NOX family enzymes, NOX4 does not require the assembly of an active enzymatic complex by recruitment of cytoplasmic regulator proteins that are critical for the activation of other NOX family members. Thus, NOX4 is a unique member of this enzyme family in that it is regulated primarily at the level of gene expression, and has thus been termed a "constitutive" enzyme. NOX4 is expressed at its highest levels in the kidney but is also widely expressed in many other cell types and hence may have a cellular function that is more general than those of some other NOX enzymes whose tissue distributions are more restricted. Whereas local NOX4-dependent ROS production in the nucleus may contribute to regulation of redox-dependent transcription factor and gene expression involved in cell growth, differentiation, senescence, and apoptosis. NOX4 acts as a good candidate for ROS-induced DNA damage. In addition, NOX4 has been described as a key player in senescence, one of the features exhibited by A-T (Ataxia telangiectasia) primary cells.

Product Info

Amount :	25 µg / 100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Western blot analysis: 2-4 µg/ml; Immunohistochemistry: 5-10 µg/ml

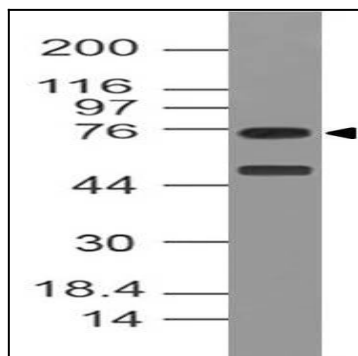


Fig:1- Expression analysis of NOX4. Anti-NOX4 antibody (Clone: ABM51H8) was tested at 2 µg/ml on U87 lysate.

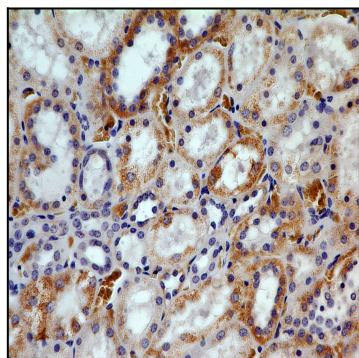


Fig:2- Immunohistochemical analysis of NOX4 in human Kidney tissue using NOX4 antibody (Clone: ABM51H8) at 5 µg/ml.