Datasheet for ABIN968246

anti-NCF2 antibody (AA 317-469)

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Overview

Quantity:	150 µg
Target:	NCF2
Binding Specificity:	AA 317-469
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This NCF2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human p67 [phox] aa. 317-469
Clone:	29-p67phox
Isotype:	IgG2b
Cross-Reactivity:	Mouse (Murine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	chromatography.

Target Details

Target:	NCF2
Alternative Name:	p67 phox (NCF2 Products)
Background:	The neutrophil respiratory burst oxidase (NADPH-oxidase) generates superoxide and secondary oxygen-derived toxic products in response to bacteria or a variety of soluble stimuli. The active site of this enzyme is located in an integral membrane cytochrome, b558, that consists of the two subunits gp91 [phox] and p21 [phox]. Superoxide production depends on the formation of a complex that includes p67 [phox], p47 [phox], and the GTP-binding protein Rac. Upon activation, these proteins translocate from the cytosol to the membrane where they assemble with b558 and induce oxidase activity. p67 [phox] contains two SH3 domains and binds, via its C-terminal SH3 domain, to the proline rich region of p47 [phox]. This binding allows p67 [phox] to indirectly associate with the oxidase. It is thought that the phosphorylated forms of p67 [phox] and p47 [phox] interact and that the phosphorylation of p67 [phox] is regulated by both PKC-dependent and independent pathways. Although the role of p67 [phox] in electron flow control is poorly understood, it is thought that it regulates the transfer of electrons from NADPH to reduce flavin.
Molecular Weight:	67 kDa

Application Details

Comment:	Related Products: ABIN968584, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

Storage Comment:	Store undiluted at -20° C.

Publications

Product cited in:

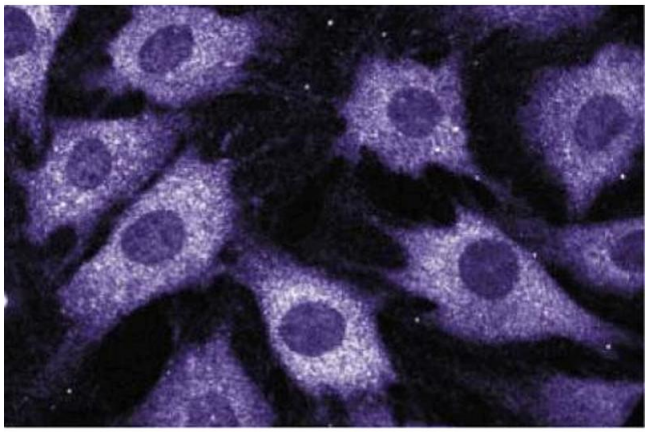
Ago, Nunoi, Ito, Sumimoto: "Mechanism for phosphorylation-induced activation of the phagocyte NADPH oxidase protein p47(phox). Triple replacement of serines 303, 304, and 328 with aspartates disrupts the SH3 domain-mediated intramolecular interaction in p47(phox), thereby activating" in: **The Journal of biological chemistry**, Vol. 274, Issue 47, pp. 33644-53, (1999) (PubMed).

Benna, Dang, Gaudry, Fay, Morel, Hakim, Gougerot-Pocidalo: "Phosphorylation of the respiratory burst oxidase subunit p67(phox) during human neutrophil activation. Regulation by protein kinase C-dependent and independent pathways." in: **The Journal of biological chemistry**, Vol. 272, Issue 27, pp. 17204-8, (1997) (PubMed).

Freeman, Lambeth: "NADPH oxidase activity is independent of p47phox in vitro." in: **The Journal of biological chemistry**, Vol. 271, Issue 37, pp. 22578-82, (1996) (PubMed).

Leto, Adams, de Mendez: "Assembly of the phagocyte NADPH oxidase: binding of Src homology 3 domains to proline-rich targets." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 91, Issue 22, pp. 10650-4, (1994) (PubMed).

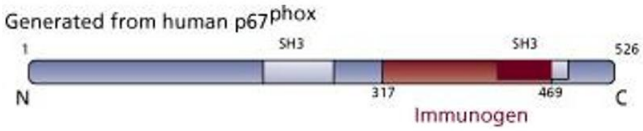
Leto, Lomax, Volpp, Nunoi, Sechler, Nauseef, Clark, Gallin, Malech: "Cloning of a 67-kD neutrophil oxidase factor with similarity to a noncatalytic region of p60c-src." in: **Science (New York, N.Y.)**, Vol. 248, Issue 4956, pp. 727-30, (1990) (PubMed).



Immunofluorescence

Image 1. Immunofluorescence staining of C3H/10T1/2 cells (Mouse embryonic fibroblasts, ATCC CCL-226).

Image 2.



Western Blotting

Image 3. Western blot analysis of p67 [phox] on a EB-1 cell lysate (Human B lymphoblast, Burkitt's lymphoma, ATCC HTB-60). Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the mouse anti-p67 [phox] antibody.