

Product datasheet for **AP06549PU-M**

NCF4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunohistochemistry on paraffin sections 1/50-1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 115-170 of Human p40-phox.
Specificity:	This antibody detects endogenous levels of p40 phox protein. (region surrounding Arg149)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 39 kDa
Gene Name:	neutrophil cytosolic factor 4
Database Link:	Entrez Gene 4689 Human Q15080



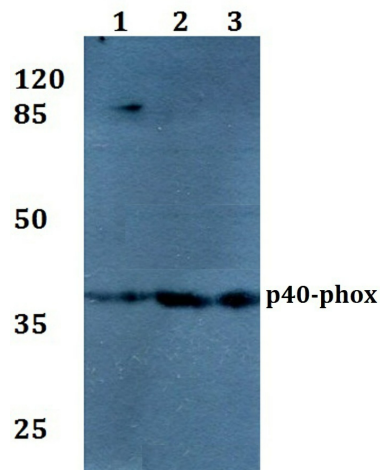
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Background:

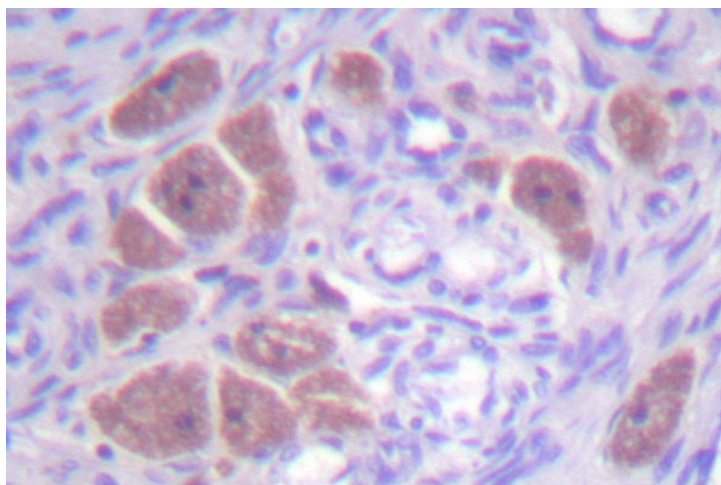
Nicotinamide adenine dinucleotide phosphate (NADPH)-oxidase is a multimeric enzyme system that mediates electron transport from NADPH in the cytoplasm to molecular oxygen in the phagosome, thereby generating reactive oxidant intermediates. Upon neutrophil stimulation, NADPH-oxidase and other cytosolic elements localize to the cell membrane from the cytosol to form a complex which produces phagocytic oxygen radicals. There are a number of cytosolic proteins that are involved in NADPH-oxidase activation/deactivation, including p47-phox, p67-phox, p40-phox and the small GTP-binding protein, Rac. Activation of NADPH oxidase is accompanied by the phosphorylation of cytosolic components p40-phox, p47-phox and p67-phox. The PKC consensus phosphorylation sites Thr 154 and Ser 315 in p40-phox are phosphorylated during activation of NADPH oxidase. p40-phox can promote oxidase activation by increasing the affinity of p47-phox for NADPH-oxidase. However, p40-phox appears to downregulate oxidase function as well, by competing with an SH3 domain interaction between other essential oxidase components.

Synonyms:

Neutrophil cytosol factor 4, SH3PXD4, p40-phox

Product images:


Western blot (WB) analysis of p40-phox antibody at 1/500 dilution Lane 1:A549 whole cell lysate Lane 2:sp2/0 whole cell lysate Lane 3:H9C2 whole cell lysate



Immunohistochemistry (IHC) analyzes of p40 phox antibody in paraffin-embedded human ovary tissue.