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Anti-p22 phox Antibody

Catalog # AP53757

Product Information

Application	WB
Primary Accession	P13498
Reactivity	Human, Mouse, Rat, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21013

Additional Information

Gene ID	1535
Other Names	Cytochrome b-245 light chain; Cytochrome b(558) alpha chain; Cytochrome b558 subunit alpha; Neutrophil cytochrome b 22 kDa polypeptide; Superoxide-generating NADPH oxidase light chain subunit; p22 phagocyte B-cytochrome; p22-phox; p22phox
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human p22 phox. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

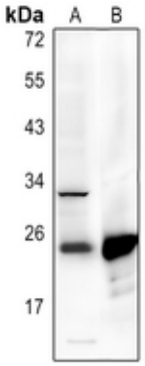
Protein Information

Name	CYBA (HGNC:2577)
Function	Subunit of NADPH oxidase complexes that is required for the NADPH oxidase activity that generates, in various cell types, superoxide from molecular oxygen utilizing NADPH as an electron donor (PubMed:15824103, PubMed:17140397, PubMed:38355798). Subunit of the phagocyte NADPH oxidase complex that mediates the transfer of electrons from cytosolic NADPH to O2 to produce the superoxide anion (O2(-)) (PubMed:38355798). In the activated complex, electrons are first transferred from NADPH to flavin adenine dinucleotide (FAD) and subsequently transferred via two heme molecules to molecular oxygen, producing superoxide through an outer-sphere reaction (PubMed:38355798). Activation of the NADPH oxidase complex is initiated by the assembly of cytosolic subunits of the NADPH oxidase complex with the core NADPH oxidase complex to form a complex at the plasma membrane or phagosomal membrane (PubMed:38355798). This

activation process is initiated by phosphorylation dependent binding of the cytosolic NCF1/p47-phox subunit to the C-terminus of CYBA/p22-phox (PubMed:19948736). Associates with NOX3 to form a functional NADPH oxidase constitutively generating superoxide (PubMed:15824103, PubMed:17140397).

Cellular Location Cell membrane; Multi-pass membrane protein

Images



Western blot analysis of p22 phox expression in HEK293T (A), mouse spleen (B) whole cell lysates. (Predicted band size: 21 kD; Observed band size: 22 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.