10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CYBA / p22phox Antibody

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18116

Product Information

Application	WB, IHC-P
Primary Accession	P13498
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21013
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	1535
Alias Symbol	CYBA
Other Names	CYBA, Cytochrome b(558) alpha chain, Cytochrome b-245 light chain, Cytochrome b558 subunit alpha, p22 phagocyte B-cytochrome, p22-PHOX, Cytochrome b light chain, p22phox
Target/Specificity	Human CYBA / p22phox
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-CYBA / p22phox Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

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