



Human CYBB peptide (DAG-P0847)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Cytochrome b (-245) is composed of cytochrome b alpha (CYBA) and beta (CYBB) chain. It has been proposed as a primary component of the microbicidal oxidase system of phagocytes. CYBB deficiency is one of five described biochemical defects associated with chronic granulomatous disease (CGD). In this disorder, there is decreased activity of phagocyte NADPH oxidase; neutrophils are able to phagocytize bacteria but cannot kill them in the phagocytic vacuoles. The cause of the killing defect is an inability to increase the cells respiration and consequent failure to deliver activated oxygen into the phagocytic vacuole. [provided by RefSeq, Jul 2008]
Conjugate	Unconjugated
Sequence Similarities	Contains 1 FAD-binding FR-type domain.Contains 1 ferric oxidoreductase domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	CYBB cytochrome b-245, beta polypeptide [Homo sapiens (human)]
Official Symbol	CYBB
Synonyms	CYBB; cytochrome b-245, beta polypeptide; CGD; NOX2; AMCBX2; GP91-1; GP91PHOX; p91-PHOX; GP91-PHOX; cytochrome b-245 heavy chain; CGD91-phox; NADPH oxidase 2; p22 phagocyte B-cytochrome; cytochrome b558 subunit beta; cytochrome b(558) subunit beta; neutrophil cytochrome b 91 kDa polypeptide; heme-binding membrane glycoprotein gp91phox; superoxide-generating NADPH oxidase heavy chain subunit;

Entrez Gene ID	1536
mRNA Refseq	NM_000397.3
Protein Refseq	NP_000388.2
UniProt ID	P04839
Chromosome Location	Xp21.1
Pathway	Adaptive Immune System, organism-specific biosystem; Antigen processing-Cross presentation, organism-specific biosystem; Class I MHC mediated antigen processing and presentation, organism-specific biosystem; Cross-presentation of particulate exogenous antigens (phagosomes), organism-specific biosystem; Disease, organism-specific biosystem; HIF-1 signaling pathway, organism-specific biosystem; Immune System, organism-specific biosystem; Latent infection of Homo sapiens with Mycobacterium tubercul
Function	contributes_to electron carrier activity; flavin adenine dinucleotide binding; heme binding; metal ion binding; protein binding; protein heterodimerization activity; contributes_to superoxide-generating NADPH oxidase activity; superoxide-generating NADPH