

CYBB/Nox2 Protein, Human (His)

Cat. No.:	HY-P72161
Synonyms:	AMCBX2; CGD; CGD91-phox; CY24B_HUMAN; CYBB; Cytochrome b 245; beta polypeptide; Cytochrome b558; beta chain; Cytochrome b558; subunit beta; Cytochrome b-245 heavy chain; Cytochrome b558 subunit beta; GP91 PHOX; gp91-1; gp91-phox; GP91PHOX; Heme-binding membrane glycoprotein gp91phox;
Species:	Human
Source:	E. coli
Accession:	P04839 (E283-F570)
Gene ID:	1536
Molecular Weight:	Approximately 37.2 kDa

PROPERTIES

AA Sequence	<pre> ERLVRFRWSQ QKVVITKVVV HPFKTIELQM KKKGFKMEVG QYIFVKCPKV SKLEWHPFTL TSAPEEDFFS IHIRIVGDWT EGLFNACGCD KQEFQDAWKL PKIAVDGPF TASEDVFSYE VVMLVGAGIG VTPFASILKS VWYKYCNNAT NLKLLKKIYFY WLCRDTHAFE WFADLLQLLE SQMQERNNAG FLSYNIYLTG WDESQANHFA VHHDEEKDVI TGLKQKTLYG RPNWDNEFKT IASQHPNTRI GVFLCGPEAL AETLSKQSIS NSESGPRGVH FIFNKENF </pre>
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 µm solution of Tris-based buffer, 50% Glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	CYBB/Nox2 protein serves as a crucial component of the membrane-bound oxidase found in phagocytes, playing a pivotal role in the generation of superoxide. As the terminal element of a respiratory chain, it facilitates the transfer of single
-------------------	--

electrons from cytoplasmic NADPH across the plasma membrane to molecular oxygen on the exterior. Additionally, CYBB/Nox2 operates as a voltage-gated proton channel, orchestrating H(+) currents in resting phagocytes. Its involvement extends to the regulation of cellular pH, and notably, this function is modulated by zinc, which serves as a blocking agent for the channel. The multifaceted activities of CYBB/Nox2 underscore its significance in the intricate cellular processes associated with oxidative and protonic regulation within phagocytes.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA