

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human COX4-I2 in direct ELISAs. In Western blots, 100% cross-reactivity with recombinant human (rh) COX4-I1 and no cross-reactivity with rhCOX-1 or rhCOX-2 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 673803
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	E.coli-derived recombinant human COX4-I2 Asn39-Lys171 Accession # Q96KJ9
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

COX4-I2 (Cytochrome c oxidase subunit 4) is a 21-22 kDa member of the Cytochrome c oxidase IV family of proteins and is predominantly expressed in lung. It is a component of COX, an inner mitochondrial membrane multimeric dimer that catalyzes the transfer of electrons from Cytochrome c to dioxygen. COX4-I2 is induced following blockade of mitochondrial respiration, leading to increased production of reactive oxygen species and necrosis. The ubiquitously expressed COX4-I1 is the product of a different gene and shares only 50% aa identity with COX4-I2. Within aa 39-171 (the oxidase domain), human COX4-I2 shares 84% and 81% aa sequence identity with mouse and rat COX4-I2, respectively.

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