

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse COX-4I1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human COX4-I1 Ala23-Lys169 Accession # P13073
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.
Immunohistochemistry	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

Cytochrome c oxidase subunit 4 isoform 1 (COX-4I1) is a 21-22 kDa member of the cytochrome c oxidase IV family of proteins. It is a component of COX, an inner mitochondrial membrane multimeric dimer that catalyzes the transfer of electrons from cytochrome c to dioxygen. COX-4I1 is the largest of 10 distinct nuclear DNA-encoded subunits that form each COX monomer. Human COX4-I1 is 169 amino acids (aa) in length and possesses a mitochondrial transit peptide between aa 1-22, an ATP binding site (aa 42; 95-100), and multiple subunit interface sequences. The ATP binding site is suggested to make COX-4I1 a regulatory subunit within the COX complex. There are two potential splice variants for COX-4I1 that show a three aa substitution for aa 81-169, and a single Gly substitution for aa 125-169. COX-4I2, the product of a different gene, shares only 50% aa identity with COX-4I1. Over amino acid 23-169, human COX4-1 shares 78% aa identity with mouse COX-4I1.

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