

Rabbit Anti-COQ10B antibody

SL11656R

Product Name:	COQ10B
Chinese Name:	辅酶Q10B抗体
Alias:	Coenzyme Q10; Coenzyme Q10 B; Coenzyme Q10 homolog B; Coenzyme Q10B; CQ10B_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep, Orangutan
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	23kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human COQ10B:38-110/238
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	COQ10B, Coenzyme Q10, is a 247 amino acid protein encoded by the human gene COQ10B. COQ10B is a mitochondrial protein that belongs to the COQ10 family. COQ10B is an essential biological cofactor which increases brain mitochondrial concentration and exerts neuroprotective effects. Plasma COQ10B levels decrease in patients with advanced chronic heart failure (CHF) while COQ10B levels in hyperthyroid patients are found among the lowest detected in human diseases. Likewise,

COQ10B is elevated in hypothyroid subjects, also in subclinical conditions, suggesting the usefulness of this index in assessing metabolic status in thyroid disorders. It is believed that secretion of adrenal hormones is in some way related to COQ10B levels, both in augmented and reduced conditions. However, since thyroid hormones have an important role in modulating COQ10B levels and metabolism, when coexistent, thyroid deficiency seems to play a prevalent role in comparison with adrenal deficiency.

Function:

COQ10 (Coenzyme Q10) is found in a wide variety of foods and is synthesized in all tissues. The de novo biosynthesis of COQ10, from its precursor tyrosine, is a multistage process that requires at least eight vitamins and several trace elements. More complex enzymes have an absolute dependancy on 'cofactors', a large group of molecules to which the coenzymes belong, for their catalyitic function. Coenzyme Q10 is the cofactor for, but not limited to, several mitochondrial enzymes that are central to the supply of adenosine triphosphate (ATP). In addition, COQ10 in its reduced form is a potent antioxidant, and in this capacity, a reduction in COQ10 levels are associtated with a variety of degenerative process including skin aging and neurodegenerative conditions such as Alzhiemer's, Huntingdon's and Parkinson's diseases.

Subunit:

Interacts with coenzyme Q

Subcellular Location:

Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

Similarity:

Belongs to the COQ10 family.

SWISS:

O9H8M1

Gene ID:

80219

Database links:

Entrez Gene: 80219Human

Entrez Gene: 67876 Mouse

SwissProt: Q9H8M1Human

SwissProt: Q3THF9Mouse

SwissProt: O5I0I9Rat

Unigene: 632547Human

	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	Sample: Cerebellum (Mouse) Lysate at 40 ug Primary: Anti- COQ10B (SL11656R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 23 kD
Observed band size: 25 kD

