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COX4NB Rabbit pAb

Catalog # AP97637

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O43402
Other Accession	O43402
Predicted	Rat, Pig, Human, Mouse, Rabbit, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23773
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human COX4NB
Epitope Specificity	121-210/210
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the EMC8/EMC9 family.
SUBUNIT	Component of the ER membrane protein complex (EMC).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	COX4NB is a 210 amino acid protein encoded by the human gene COX4NB. COX4NB belongs to the UPF0172 (NOC4) family and is found on chromosome 16, adjacent to the gene that encodes COX4. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16 through the CREBBP gene which encodes a critical CREB binding protein. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene. An association with systemic lupus erythematosis and a number of other auto-immune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

Additional Information

Gene ID	10328
Other Names	C16orf2; C16orf4; COX4NB; FAM158B; NOC4; DD6A4-2(5); EMC8_HUMAN; EMC8; Neighbor of COX4; Protein FAM158B; COX4AL; EMC8_MOUSE; EMC8_RAT; ER membrane protein complex subunit 8; chromosome 16 open reading frame 4; chromosome 16 open reading frame 2; COX4 neighbor; family with sequence similarity 158, member B
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	EMC8
Synonyms	C16orf2, C16orf4, COX4AL, COX4NB, FAM158
Function	Part of the endoplasmic reticulum membrane protein complex (EMC) that enables the energy-independent insertion into endoplasmic reticulum membranes of newly synthesized membrane proteins (PubMed:29242231, PubMed:29809151, PubMed:30415835, PubMed:32439656, PubMed:32459176). Preferentially accommodates proteins with transmembrane domains that are weakly hydrophobic or contain destabilizing features such as charged and aromatic residues (PubMed:29242231, PubMed:29809151, PubMed:30415835). Involved in the cotranslational insertion of multi-pass membrane proteins in which stop-transfer membrane-anchor sequences become ER membrane spanning helices (PubMed:29809151, PubMed:30415835). It is also required for the post-translational insertion of tail-anchored/TA proteins in endoplasmic reticulum membranes (PubMed:29242231, PubMed:29809151). By mediating the proper cotranslational insertion of N-terminal transmembrane domains in an N-exo topology, with translocated N- terminus in the lumen of the ER, controls the topology of multi-pass membrane proteins like the G protein-coupled receptors (PubMed:30415835). By regulating the insertion of various proteins in membranes, it is indirectly involved in many cellular processes (Probable).
Cellular Location	Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side
Tissue Location	Expressed in liver, pancreas, heart, lung, kidney, brain, skeletal muscle, and placenta. Expression levels are highest in pancreas and moderate in heart, skeletal muscle, and placenta

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.