

COX4NB (2643C6a): sc-81070

BACKGROUND

COX4NB (neighbor of COX4) 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 erythematosus and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

REFERENCES

1. Ben Hamida, C., et al. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. *Neurogenetics* 1: 129-133.
2. Karlsson, J., et al. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. *J. Immunol.* 170: 1019-1026.
3. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. *Genes Immun.* 7: 609-614.
4. Carneiro, L.A., et al. 2007. Nod-like receptors in innate immunity and inflammatory diseases. *Ann. Med.* 39: 581-593.
5. Gervasini, C., et al. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germ-line breakpoints. *Genomics* 90: 567-573.
6. King, K., et al. 2007. Identification, evolution, and association study of a novel promoter and first exon of the human NOD2 (CARD15) gene. *Genomics* 90: 493-501.

CHROMOSOMAL LOCATION

Genetic locus: EMC8 (human) mapping to 16q24.1; Emc8 (mouse) mapping to 8 E1.

SOURCE

COX4NB (2643C6a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the C-terminus of COX4NB of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

APPLICATIONS

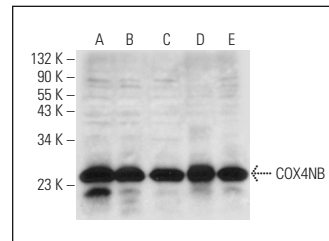
COX4NB (2643C6a) is recommended for detection of COX4NB of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for COX4NB siRNA (h): sc-93320, COX4NB siRNA (m): sc-142526, COX4NB shRNA Plasmid (h): sc-93320-SH, COX4NB shRNA Plasmid (m): sc-142526-SH, COX4NB shRNA (h) Lentiviral Particles: sc-93320-V and COX4NB shRNA (m) Lentiviral Particles: sc-142526-V.

Molecular Weight of COX4NB: 24 kDa.

Positive Controls: JAR cell lysate: sc-2276, MIA PaCa-2 cell lysate: sc-2285 or SK-N-MC cell lysate: sc-2237.

DATA



COX4NB (2643C6a): sc-81070. Western blot analysis of COX4NB expression in JAR (A), JEG-3 (B), MIA PaCa-2 (C), WI 38 (D) and SK-N-MC (E) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.