

CDX1 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1839a

Product Information

Application WB, E **Primary Accession** P47902 Reactivity Human Host Mouse Monoclonal Clonality **Clone Names** 1B11A9 Isotype IgG2a 28138 **Calculated MW**

DescriptionThis gene is a member of the caudal-related homeobox transcription factor

gene family. The encoded DNA-binding protein regulates intestine-specific gene expression and enterocyte differentiation. It has been shown to induce

expression of the intestinal alkaline phosphatase gene, and inhibit

beta-catenin/T-cell factor transcriptional activity.

Immunogen Purified recombinant fragment of human CDX1 (AA: 122-227) expressed in E.

Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID 1044

Other Names Homeobox protein CDX-1, Caudal-type homeobox protein 1, CDX1

Dilution WB~~1/500 - 1/2000 E~~1/10000

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions CDX1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name CDX1

Function Plays a role in transcriptional regulation (PubMed: <u>24623306</u>). Involved in

activated KRAS-mediated transcriptional activation of PRKD1 in colorectal cancer (CRC) cells (PubMed:24623306). Binds to the PRKD1 promoter in

colorectal cancer (CRC) cells (PubMed: <u>24623306</u>). Could play a role in the terminal differentiation of the intestine. Binds preferentially to methylated DNA (PubMed: <u>28473536</u>).

Cellular Location Nucleus.

Tissue Location Intestinal epithelium.

Background

This gene encodes a large protein that resides in the limiting membrane of endosomes and lysosomes and mediates intracellular cholesterol trafficking via binding of cholesterol to its N-terminal domain. It is predicted to have a cytoplasmic C-terminus, 13 transmembrane domains, and 3 large loops in the lumen of the endosome - the last loop being at the N-terminus. This protein transports low-density lipoproteins to late endosomal/lysosomal compartments where they are hydrolized and released as free cholesterol. Defects in this gene cause Niemann-Pick type C disease, a rare autosomal recessive neurodegenerative disorder characterized by over accumulation of cholesterol and glycosphingolipids in late endosomal/lysosomal compartments.;

References

1. Am J Pathol. 2012 Aug;181(2):487-98. 2. J Korean Med Sci. 2011 May;26(5):647-53.

Images

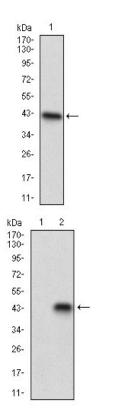


Figure 1: Western blot analysis using CDX1 mAb against human CDX1 recombinant protein. (Expected MW is 37.9 kDa)

Figure 2: Western blot analysis using CDX1 mAb against HEK293 (1) and CDX1 (AA: 122-227)-hIgGFc transfected HEK293 (2) cell lysate.

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