10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CDX1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1839a

Product Information

Application	WB, E
Primary Accession	P47902
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1B11A9
Isotype	IgG2a
Calculated MW	28138
Description	This 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: 24623306). 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:24623306). Could play a role in the terminal differentiation of the intestine. Binds preferentially to methylated DNA (PubMed:28473536).

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

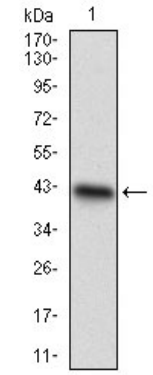


Figure 1: Western blot analysis using CDX1 mAb against human CDX1 recombinant protein. (Expected MW is 37.9 kDa)

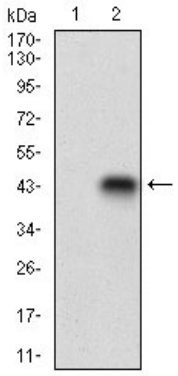


Figure 2: Western blot analysis using CDX1 mAb against HEK293 (1) and CDX1 (AA: 122-227)-hIgGFc transfected HEK293 (2) cell lysate.

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