

**CDX1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1839a****Specification****CDX1 Antibody - Product Information**

Application	<b>E, WB</b>
Primary Accession	<a href="#">P47902</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG2a</b>
Calculated MW	<b>28.1kDa KDa</b>

**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

**CDX1 Antibody - Additional Information**

**Gene ID** 1044

**Other Names**

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

**Dilution**

E~~1/10000

WB~~1/500 - 1/2000

**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.

**CDX1 Antibody - Protein Information**

**Name** CDX1

### Function

Plays a role in transcriptional regulation (PubMed:<a href="http://www.uniprot.org/citations/24623306" target="\_blank">24623306</a>). Involved in activated KRAS-mediated transcriptional activation of PRKD1 in colorectal cancer (CRC) cells (PubMed:<a href="http://www.uniprot.org/citations/24623306" target="\_blank">24623306</a>). Binds to the PRKD1 promoter in colorectal cancer (CRC) cells (PubMed:<a href="http://www.uniprot.org/citations/24623306" target="\_blank">24623306</a>). Could play a role in the terminal differentiation of the intestine. Binds preferentially to methylated DNA (PubMed:<a href="http://www.uniprot.org/citations/28473536" target="\_blank">28473536</a>).

### Cellular Location

Nucleus.

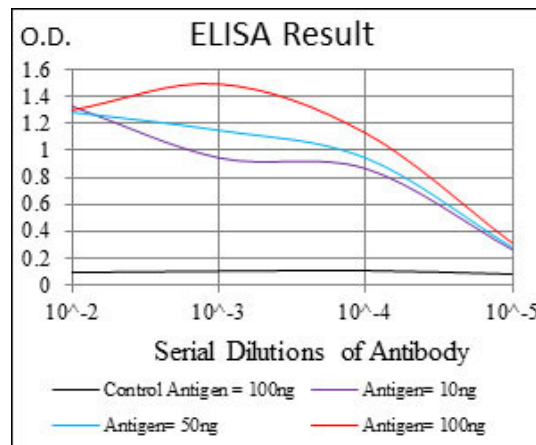
### Tissue Location

Intestinal epithelium.

### CDX1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



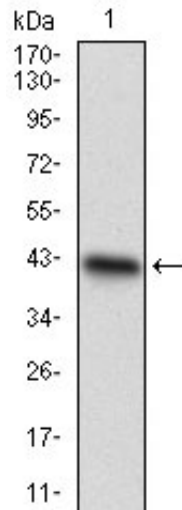


Figure 1: Western blot analysis using CDX1 mAb against human CDX1 recombinant protein. (Expected MW is 37.9 kDa)

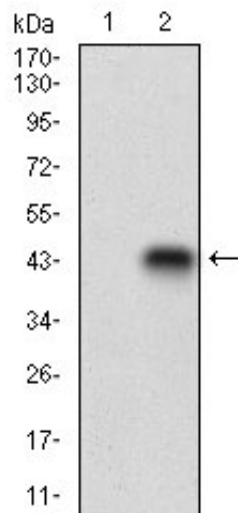


Figure 2: Western blot analysis using CDX1 mAb against HEK293 (1) and CDX1 (AA: 122-227)-hlgGfc transfected HEK293 (2) cell lysate.

### CDX1 Antibody - 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 hydrolyzed 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. ;

### CDX1 Antibody - References

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