

#### CDX2 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1885a

### Specification

## CDX2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  WB, FC, E <u>099626</u> Human Mouse Monoclonal IgG1 33.5kDa KDa

This gene is a member of the caudal-related homeobox transcription factor gene family. The encoded protein is a major regulator of intestine-specific genes involved in cell growth an differentiation. This protein also plays a role in early embryonic development of the intestinal tract. Aberrant expression of this gene is associated with intestinal inflammation and tumorigenesis.

Immunogen Purified recombinant fragment of human CDX2 (AA: 176-303) expressed in E. Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

#### **CDX2** Antibody - Additional Information

Gene ID 1045

**Other Names** Homeobox protein CDX-2, CDX-3, Caudal-type homeobox protein 2, CDX2, CDX3

Dilution WB~~1/500 - 1/2000 FC~~1/200 - 1/400 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** CDX2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **CDX2 Antibody - Protein Information**



Name CDX2

Synonyms CDX3

### Function

Transcription factor which regulates the transcription of multiple genes expressed in the intestinal epithelium (By similarity). Binds to the promoter of the intestinal sucrase-isomaltase SI and activates SI transcription (By similarity). Binds to the DNA sequence 5'-ATAAAAACTTAT-3' in the promoter region of VDR and activates VDR transcription (By similarity). Binds to and activates transcription of LPH (By similarity). Activates transcription of CLDN2 and intestinal mucin MUC2 (By similarity). Binds to the 5'-AATTTTTACAACACCT-3' DNA sequence in the promoter region of CA1 and activates CA1 transcription (By similarity). Important in broad range of functions from early differentiation to maintenance of the intestinal epithelial lining of both the small and large intestine. Binds preferentially to methylated DNA (PubMed:<a href="http://www.uniprot.org/citations/28473536" target=" blank">28473536</a>).

Cellular Location Nucleus {ECO:0000250|UniProtKB:P43241}.

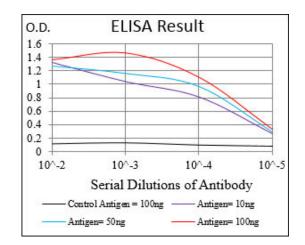
**Tissue Location** 

Detected in small intestine, colon and pancreas.

## **CDX2 Antibody - Protocols**

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



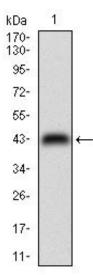


Figure 1: Western blot analysis using CDX2 mAb against human CDX2 (AA: 176-303) recombinant protein. (Expected MW is 40.1 kDa)

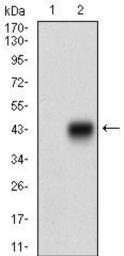


Figure 2: Western blot analysis using CDX2 mAb against HEK293 (1) and CDX2 (AA: 176-303)-hIgGFc transfected HEK293 (2) cell lysate.

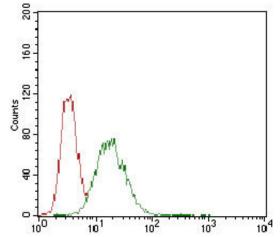


Figure 3: Flow cytometric analysis of Hela cells using CDX2 mouse mAb (green) and negative control (red).



# CDX2 Antibody - Background

The protein encoded by this gene is a surface antigen that is preferentially expressed on monocytes/macrophages. It cooperates with other proteins to mediate the innate immune response to bacterial lipopolysaccharide. Alternative splicing results in multiple transcript variants encoding the same protein. ; ; ; ;

#### **CDX2 Antibody - References**

1. Tumour Biol. 2012 Dec;33(6):2185-8. 2. Cancer Biol Ther. 2012 Oct;13(12):1152-7.