

CDX2 Antibody

Purified Mouse Monoclonal Antibody Catalog # A01882a

Specification

CDX2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** WB, E <u>Q99626</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 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:28473536).

Cellular Location

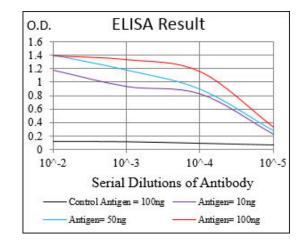
Nucleus {ECO:0000250|UniProtKB:P43241}.

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



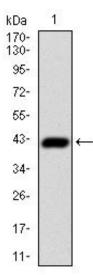


Figure 1: Western blot analysis using CDX2 mAb against human CDX2 (AA: 176-303) recombinant protein. (Expected MW is 40.1 kDa)

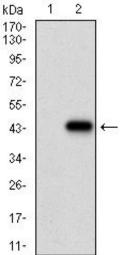


Figure 2: Western blot analysis using CDX2 mAb against HEK293 (1) and CDX2 (AA: 176-303)-hlgGFc transfected HEK293 (2) cell lysate.

CDX2 Antibody - Background

The protein encoded by this gene is a DNA-binding transcription factor that activates many muscle-specific, growth factor-induced, and stress-induced genes. The encoded protein can act as a homodimer or as a heterodimer and is involved in several cellular processes, including muscle development, neuronal differentiation, cell growth control, and apoptosis. Defects in this gene could be a cause of autosomal dominant coronary artery disease 1 with myocardial infarction (ADCAD1). Several transcript variants encoding different isoforms have been found for this gene. ;

CDX2 Antibody - References

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