

### **CDX2 Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6131A

### **Specification**

# CDX2 Antibody (N-term) - Product Information

**Application** WB, IHC-P,E **Primary Accession** 099626 Other Accession P43241 Reactivity Human Predicted Mouse Host Rabbit Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 33520 Antigen Region 1-30

# CDX2 Antibody (N-term) - Additional Information

### **Gene ID 1045**

### **Other Names**

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

### Target/Specificity

This CDX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CDX2.

### **Dilution**

WB~~1:1000 IHC-P~~1:50~100

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

CDX2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# CDX2 Antibody (N-term) - 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'-ATAAAACTTAT-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'-AATTTTTTACAACACCT-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**

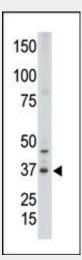
Detected in small intestine, colon and pancreas.

### CDX2 Antibody (N-term) - Protocols

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

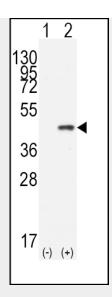
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### CDX2 Antibody (N-term) - Images

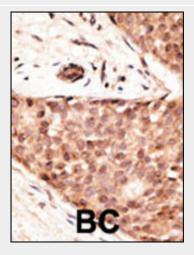


The anti-CDX2 N-term Pab (Cat. #AP6131a) is used in Western blot to detect CDX2 in placenta tissue lysate.





Western blot analysis of CDX2(arrow) using rabbit polyclonal CDX2 Antibody (N-term)(Cat. #AP6131a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CDX2 gene (Lane 2) (Origene Technologies).

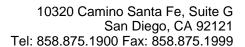


Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

### CDX2 Antibody (N-term) - Background

The caudal type homeo box transcription factors 1 (CDX1) and 2 (CDX2) are candidates for directing intestinal development, differentiation, and maintenance of the intestinal phenotype. CDX1 and CDX2 expression is widely present in the human intestinal and colonic mucosae, but not in the gastric mucosa, suggesting a possible role in the terminal differentiation of the intestine. Increased CDX2 expression is associated with chronic atrophic gastritis. Detectable expression of CDX2 precedes expression of CDX1 during the progression of intestinal metaplasia, thus expression of CDX2 may trigger the initiation and development of intestinal metaplasia. Markedly reduced or absent CDX2 expression was noted by immunohistochemistry in 13 of 15 (87%) large cell minimally differentiated carcinomas (LCMDCs), whereas only 1 of the 25 (4%) differentiated adenocarcinomas (DACs) showed reduced CDX2 expression. Thus, a significant decrease in human CDX1 and/or CDX2 expression may be associated with colorectal tumorigenesis.

# CDX2 Antibody (N-term) - References





Phillips, R.W., et al., Am. J. Surg. Pathol. 27(11):1442-1447 (2003). Bai, Y.Q., et al., Oncogene 22(39):7942-7949 (2003). Yamamoto, H., et al., Biochem. Biophys. Res. Commun. 300(4):813-818 (2003). Eda, A., et al., J. Gastroenterol. 37(2):94-100 (2002). Moucadel, V., et al., Biochem. Biophys. Res. Commun. 297(3):607-615 (2002).