

### CDX2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6131A

### Specification

## CDX2 Antibody (N-term) - Product Information

WB, IHC-P,E <u>099626</u> <u>P43241</u> Human Mouse Rabbit Polyclonal Rabbit IgG 33520
33520 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 E~~Use at an assay dependent concentration.

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'-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'-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:<u>28473536</u>).

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

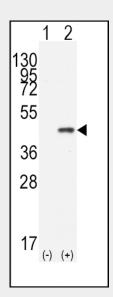
**Tissue Location** Detected in small intestine, colon and pancreas.

## CDX2 Antibody (N-term) - Protocols

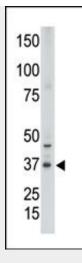
Provided below are standard protocols that you may find useful for product applications.

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

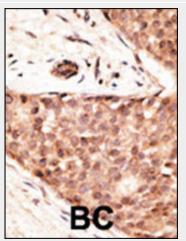
CDX2 Antibody (N-term) - Images



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).



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



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).