

CDX2 Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP6131a

Specification

CDX2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q99626</u>

CDX2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 1045

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6131a was selected from the N-term region of human CDX2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CDX2 Antibody (N-term) Blocking Peptide - 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:28473536).



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

Tissue Location Detected in small intestine, colon and pancreas.

CDX2 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

CDX2 Antibody (N-term) Blocking Peptide - Images

CDX2 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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).