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CDX2 Antibody

Catalog # ASC11062

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q99626
Other Accession	CAA74038, 2193875
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	33520
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CDX2 antibody can be used for detection of CDX2 by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	1045
Other Names	Homeobox protein CDX-2, CDX-3, Caudal-type homeobox protein 2, CDX2, CDX3
Target/Specificity	CDX2;
Reconstitution & Storage	CDX2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	CDX2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

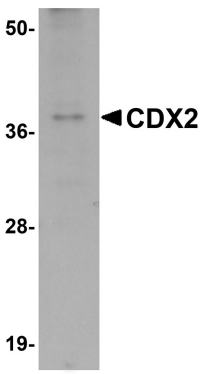
Background

CDX2 Antibody: CDX2 is a member of the caudal homeobox family of transcription factors that also includes the proteins CDX1 and CDX4. CDX2 is strongly expressed in the trophectoderm in the blastocyst with expression maintained within the proliferating extra-embryonic ectoderm during development. It is required for the repression of the transcription of the POU5F1/Oct4 and NANOG genes in the outer cells of the blastocyst and is thus essential for the segregation of the inner cell mass and trophectoderm at the blastocyst stage. Aberrant expression of CDX2 is associated with numerous types of carcinomas, including intestinal metaplasia, gastric carcinoma, and acute myeloid leukemia due to deregulated HOX gene expression.

References

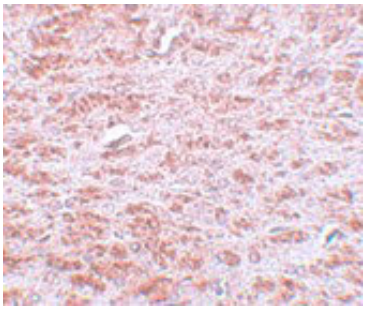
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Strumpf D, Mao CA, Yamanaka Y, et al. Cdx2 is required for correct cell fate specification and differentiation of trophectoderm in the mouse blastocyst. Dev.2005; 132:2093-102.
Ishikawa A, Sasaki M, Ohira S, et al. Aberrant expression of CDX2 is closely related to the intestinal metaplasia and MUC2 expression in intraductal papillary neoplasm of the liver in hepatolithiasis. Lab. Invest.2004; 84:629-38.
Silberg DG, Sullivan J, Kang E, et al. Cdx2 ectopic expression induces gastric intestinal metaplasia in transgenic mice. Gastroenterology2002; 122:689-96.

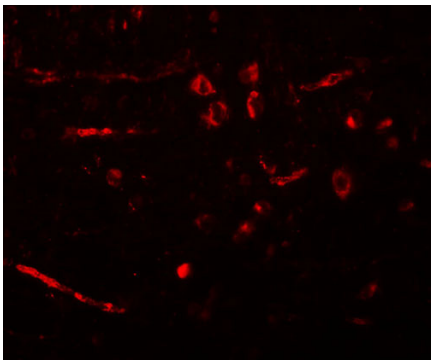
Images



Western blot analysis of CDX2 in mouse brain tissue lysate with CDX2 antibody at 1 µg/mL.

Immunohistochemistry of CDX2 in rat brain tissue with CDX2 antibody at 5 µg/mL.





Immunofluorescence of CDX2 in rat brain tissue with CDX2 antibody at 20 µg/mL.

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