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Phospho-CDX2(S283) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3701a

Product Information

Application	WB, IF, DB, E
Primary Accession	Q99626
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16600
Calculated MW	33520

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 phosphopeptide corresponding to amino acid residues surrounding S283 of human CDX2.
Dilution	WB~~1:1000 IF~~1:10~50 DB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	Phospho-CDX2(S283) 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.

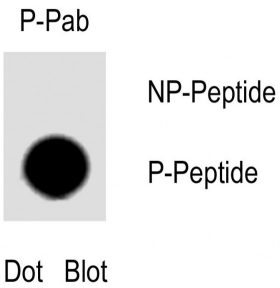
Background

The level and beta-cell specificity of insulin gene expression are regulated by a set of nuclear proteins that bind to specific sequences within the promoter of the insulin gene (INS; MIM 176730) and interact with RNA polymerase to activate or repress transcription. The proteins LMX1 (MIM 600298) and CDX3 are homeodomain proteins that bind an A/T-rich sequence in the insulin promoter and stimulate its transcription.

References

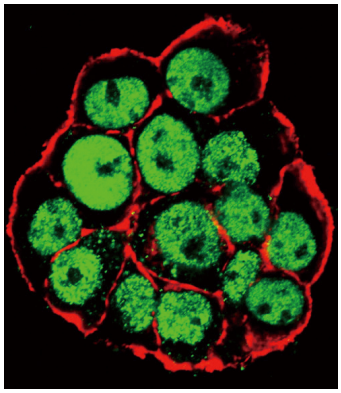
Benoit, Y.D., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 298 (4), G504-G517 (2010)
Xie, Y., et al. Int. J. Oncol. 36(2):509-516(2010)
Park do, Y., et al. Mod. Pathol. 23(1):54-61(2010)
Lora, V., et al. Anticancer Res. 29(12):5033-5037(2009)
Porjazova, E., et al. Akush Ginekol (Sofiia) 48(4):32-34(2009)

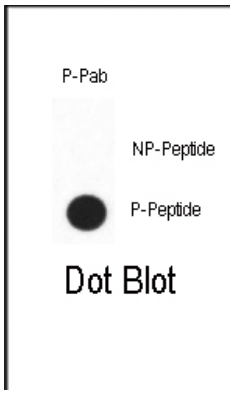
Images



Dot blot analysis of Phospho-CDX2(S283) Antibody Phospho-specific Pab (Cat. AP3701a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antobodies working concentration was 0. 5ug per ml.

Confocal immunofluorescent analysis of Phospho-CDX2-S283 Antibody(Cat#AP3701a) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).





Dot blot analysis of anti-Phospho-CDX2 Phospho-specific Pab (Cat. #AP3701a閱?) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are0.5ug per ml.