

PRODUCT NAME			
Mouse Cdx2 promoter primer Pairs			
Official full name: Caudal type homeo box 2			
Other name: Cdx-2			
Primary source: MGI: 88361			
Cat. No: pp-1025-050	Size: 50 µl	Concentration: 10 µM	Lot #: 001
Cat. No: pp-1025-500	Size: 500 µl	Concentration: 10 µM	Lot #: 001

10 sets of our primer pairs: 50 µl (see our list)
500 µl

Description: The primer pair cat:# pp-1025 [-050, -500] is specific to a DNA region in the mouse Cdx2 gene promoter [1]. These primers can be used to amplify DNA isolated by chromatin immunoprecipitation (ChIP). Primers are optimized to be used in quantitative polymerase chain reaction (qPCR) (**Figures 1 and 2**). See overview below

Expected PCR product size: 128 base pairs (bp).

Specificity: Mouse: positive
Other species: not tested

Format: In solution in MiliQ water at the concentration of 10 µM (each oligonucleotide primer is at the final concentration of 5 µM).

Storage: For long storage, store at -20°C. Avoid multiple freeze-thaw cycles.

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

References: [1] O'Neill L.P., VerMilyea M.D. and Turner B.M. (2006) Nat. Genet. 38 (7): 835-41.
[2] Hart A.H., Hartley L., Ibrahim M. and Robb L. (2004) Dev. Dyn. 230 (1): 187-98.
[3] Pan G. and Thomson J.A. (2007) Cell Res. 17 (1): 42-9.

Availability date: September 03, 2007

Last data sheet update: September 14, 2007

Lot #: 001/ day of the synthesis: May 25, 2007/ day of QC: August 17, 2007/ aliquoting day: August 24, 2007

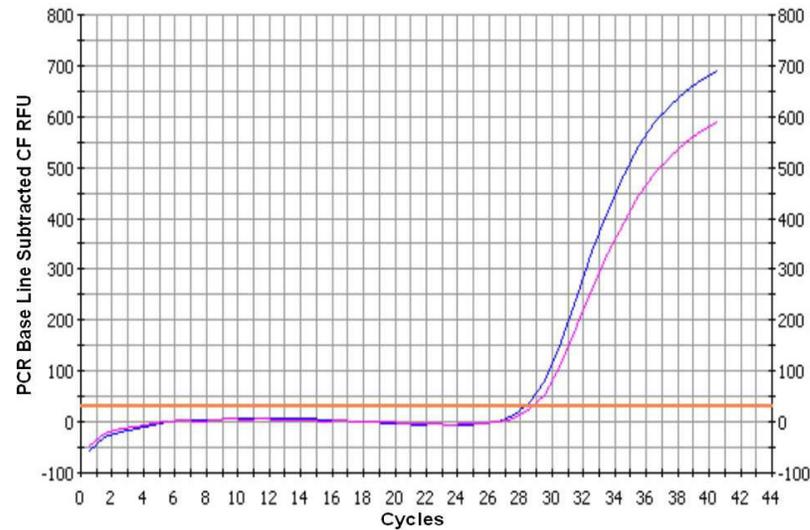


Figure 1

DNA from mouse fibroblast 3T3 cells was analyzed in duplicate by real-time PCR starting from 5 µl of DNA template (0.03 µg/ml) using the Diagenode primers to amplify a region in the mouse Cdx2 gene promoter (cat#: pp-1025-050, -500). One µl of primer pairs is used by PCR of 25 µl final volume. A Real-Time PCR Detection System and iQ SYBR Green have been used. qPCR conditions used are as follows: 95°C for 3 minutes, 41 cycles of: [95°C for 60 seconds, 60°C for 60 seconds and 72°C for 90 seconds]. Duplicates are shown in blue and pink. Threshold position is in orange.

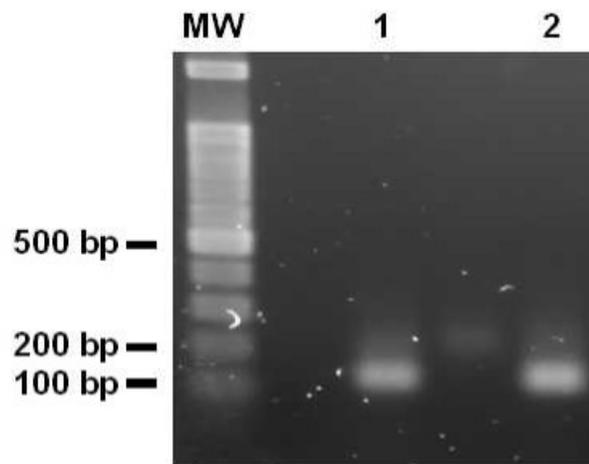


Figure 2.

qPCR products were analysed by electrophoresis (1.5% agarose gel) stained with SYBR Safe and illuminated with UV light. The left lane shows molecular weight markers (MW) that decrease in size by 100 bp. Different qPCR products using different primer pairs which are available at Diagenode were tested: 1: primers for mouse Cdx2 gene promoter (pp-1025-050, -500), 2: primers for mouse Hhex gene promoter (pp-1027-050, -500). For more details about other primer pairs, see data sheet.

Overview: Cdx2 is involved in the transcriptional regulation of multiple genes expressed in the intestinal epithelium. It is important in broad range of functions from early differentiation to maintenance of the intestinal epithelial lining of both the small and large intestine [2].