

PRODUCT NAME			
<b>Mouse Cdx2 coding Primer Pairs</b>			
<b>Official full name:</b> Caudal type homeo box 2			
<b>Other name:</b> Cdx-2			
<b>Primary source:</b> MGI: 88361			
<b>Cat. No:</b> pp-1026-050	<b>Size:</b> 50 µl	<b>Concentration:</b> 10 µM	<b>Lot #:</b> 001
<b>Cat. No:</b> pp-1026-500	<b>Size:</b> 500 µl	<b>Concentration:</b> 10 µM	<b>Lot #:</b> 001

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

**Description:** The primer pair (cat:# pp-1026 -050, -500) is specific to a coding DNA region in the mouse Cdx2 gene [1]. These primers can be used to amplify DNA isolated by chromatin immunoprecipitation (ChIP). Primers are optimized to be used in qPCR (**Figures 1, 2**). See overview below.

**Expected PCR product size:** 147 base pairs (bp).

**Amplified locus:** chr5:148118319-148118465

**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.

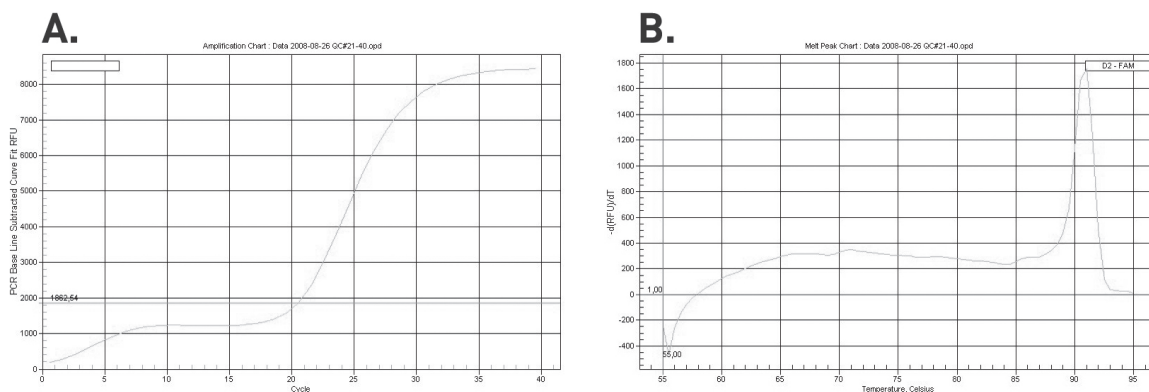
**Precautions:** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**References:** [1] O'Neill L.P., VerMilyea M.D. and Turner B.M. (2006) Nat. Genet. 38(7):835-41.  
[2] Guo R.J., Suh E.R. and Lynch J.P. (2004) Cancer Biol. Ther. 3 (7): 593-601.

**Availability date:** October 1, 2008

**Last data sheet update:** October 30, 2008

**Lot #:** 002/ day of synthesis: August 20, 2008/ day of QC: August 25, 2008 /aliquoting day: September 30, 2008



**Figure 1**

A coding region from the mouse *cdx-2* gene located at chr5:148118319-148118465 was amplified using the Diagenode primers (cat#: pp-1026-050, -500). PCR was run with 50 ng of mouse genomic DNA from 3T3 cell line in 25  $\mu$ l of final volume with 1  $\mu$ l of provided primers. PCR conditions were as follows: 95°C for 3 min, 40 cycles of [95°C for 1 min, 60°C for 1 min, 72°C for 1 min] and 1 cycle at 72°C for 2 min. The amplification chart is presented in the upper panel with threshold position in blue. The melting curve is presented in the bottom panel.



**Figure 2.**

PCR product amplified with the Diagenode primers (cat#: pp-1026-050, -500) as described in Figure 1 was analysed by electrophoresis (2% agarose gel stained with SYBR Safe). The left line shows the 100 bp molecular weight ladder. The right line shows the amplified region from the mouse *cdx-2* gene (147 bp).

**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].