

| PRODUCT NAME                             |                   |                           |            |
|--|-------------------|---------------------------|------------|
| Mouse GAPDH promoter -1.1kb Primer Pairs |                   |                           |            |
| Cat. No: <b>pp-1009-050</b>              | Size: 50 $\mu$ l  | Concentration: 10 $\mu$ M | Lot #: 001 |
| Cat. No: <b>pp-1009-500</b>              | Size: 500 $\mu$ l | Concentration: 10 $\mu$ M | Lot #: 001 |

**10 sets of our primer pairs:** 50  $\mu$ l (see our list)  
500  $\mu$ l

**Description:** These primers are specific to a DNA region located 1.1kb upstream (-1.1kb) from the mouse glyceraldehyde-3-phosphate dehydrogenase (GAPDH) promoter. 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) (**Figure 1 and Figure 2**).

**Expected PCR product size:** 51 base pairs (bp).

**Specificity:** Mouse: positive  
Other species: not tested

**Format:** In solution in MiliQ water at the concentration of 10  $\mu$ M.

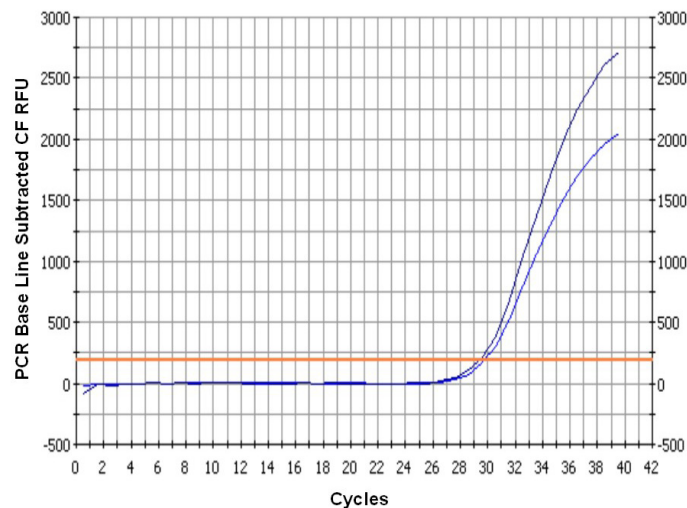
**Storage:** For long storage, store at -20°C. Avoid multiple freeze-thaw cycles.

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

**Availability date:** July 16, 2007

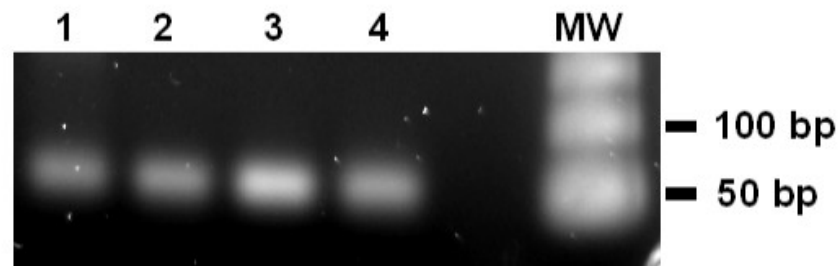
**Last data sheet update:** July 16, 2007

**Lot #:** 001/ day of synthesis: May 25, 2007/ day of QC: July 13, 2007/ aliquoting day: July 13, 2007



**Figure 1**

DNA from mouse fibroblast 3T3 cells was analyzed in duplicate by real-time PCR starting from 5  $\mu$ l of DNA template (0.03 $\mu$ g/ml) using the Diagenode primers to amplify a region located at -1.1kb of the mouse GAPDH promoter (cat#: pp-1009-050, -500). One  $\mu$ l of provided primer pairs is used by PCR of 25  $\mu$ l 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, 40 cycles of: [95°C for 15 seconds, 60°C for 45 seconds] and 1 cycle of 95°C for 1 minute. Duplicates are shown in blue. 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 right lane shows molecular weight markers (MW) that decrease in size by 50 bp. Different qPCR products using different primer pairs which are available at Diagenode were tested: 1: primers for mouse GAPDH promoter (cat#: pp-1007-050 and cat#: pp-1007-500), 2: primers for mouse GAPDH promoter -0.6kb (cat#: pp-1008-050 and cat#: pp-1008-500), 3: primers for mouse GAPDH promoter -1.1kb (cat#: pp-1009-050 and cat#: pp-1009-500), 4: primers for mouse myoglobin exon 2 (cat#: pp-1010-050 and cat#: pp-1010-500).