

Human GAPDH promoter - 1.0kb

Primer pairs

Cat. No. C17011003

Size: 50 µl/500 µl

Concentration: 10 µM

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

Specificity: Human: positive. Other species: not tested.

Format: In solution in MiliQ water at a concentration of 10 µM (5 µM each)

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.

Description: These primers are specific to a DNA region located 1.0kb upstream (-1.0kb) from the human 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**).

Results

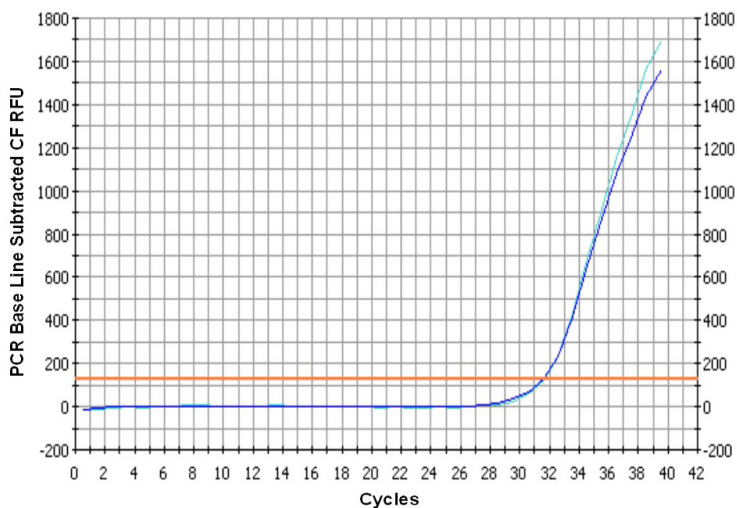


Figure 1.

DNA from undifferentiated human teratocarcinoma NCCIT cells was analyzed in duplicate by real-time PCR starting from 5 µl of DNA template [0.01µg/ml] using the Diagenode primers to amplify a region located at -1.0kb of the human GAPDH promoter [Cat. No. C17011003]. One µl of provided 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, 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.

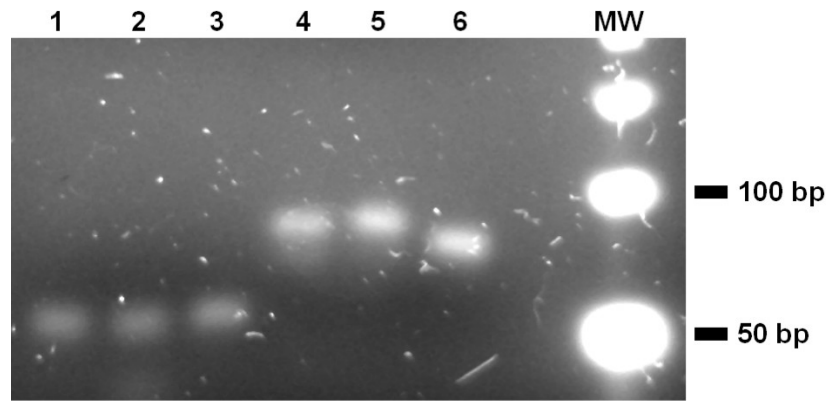


Figure 2.

qPCR products were analysed by electrophoresis (2% 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 human GAPDH promoter (Cat. No. C17011001), 2: primers for human GAPDH promoter -0.5kb (Cat. No. C17011002), 3: primers for human GAPDH promoter -1.0kb (Cat. No. C17011003), 4: primers for human c-fos promoter (Cat. No. C17011004), 5: primers for human beta-actin promoter (Cat. No. C17011005) and 6: primers for human myoglobin exon 2 (Cat. No. C17011006).