

PRODUCT NAME	
Human ChIP-seq grade H19 Primer Pair	
Cat. No: C17011049	Format: 50 µl
	Format: 500 µl

Description: This primer pair specifically amplifies a genomic region from the H19 imprinting control region. The primers are thoroughly tested and optimized for routine SYBR® Green Real-Time qPCR assay following ChIP and for ChIP-sequencing library validation (e.g. before and after ChIP-seq library preparation).

Amplicon length: 118 base pairs

Amplified region: chr11:1,980,707-1,980,824

Specificity: Human

Format: 10 µM solution in MiliQ water (5 µM of each primer)

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

Last data sheet update: March 31, 2015

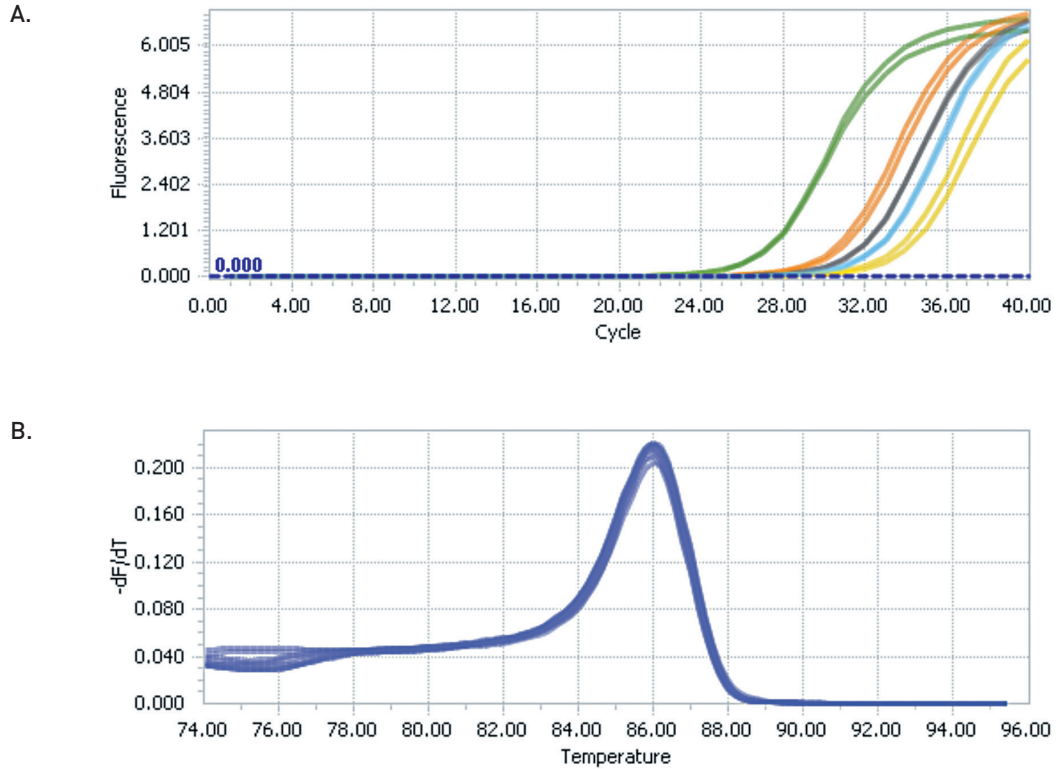


Figure 1. SYBR Green real-time PCR was performed in duplicate on input DNA and 4 ChIP samples using the Diagenode H19 primer pair (Cat. No. C17011049). The template was amplified with 1.25 μ l of the provided primers in 25 μ l total reaction volume on a Roche LightCycler96 using the KAPA SYBR FAST qPCR kit. qPCR conditions were as follows: incubation at 95°C for 5 minutes, followed by 40 cycles of 10 seconds at 95°C, 30 seconds at 60°C, and 30 seconds at 72°C. Figure 1A shows the amplification curves; figure 1B shows the melting curves of the different amplification products.

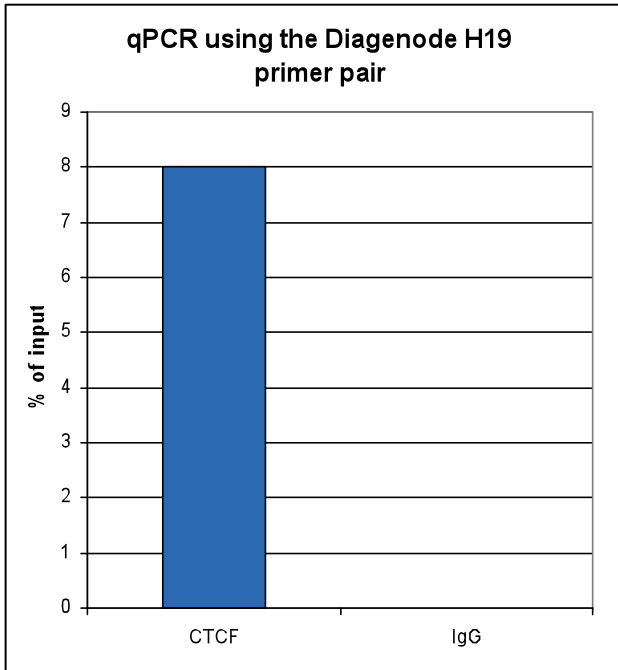


Figure 2. ChIP was performed on HeLa cells using an antibody against CTCF (cat. No. C15410210) and rabbit IgG used as a negative IP control. The ChIP'd DNA was analysed by qPCR using the Diagenode H19 primer pair (Cat. No. C170110419). Figure 2 shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).

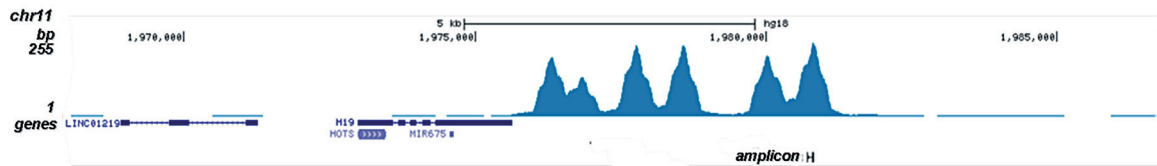


Figure 3. ChIP was performed as described above and the ChIP'd DNA was subsequently analysed by high throughput sequencing on an Illumina Hiseq. Figure 3 shows the CTCF profile in a region of chromosome 11 containing the H19 imprinting control region. The position of the amplicon obtained with the Diagenode CTCF primer pair is indicated.