

PRODUCT NAME			
Mouse 5' flanking Cfc1 Primer Pairs			
Official full name: Cripto, FLR-1, cryptic family 1			
Other name: cryptic, AV265756			
Primary source: MGI: 109448			
Cat. No: pp-1034-050	Size: 50 µl	Concentration: 10 µM	Lot #: 001
Cat. No: pp-1034-500	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-1034 (-050, -500) is specific to a DNA 5' flanking region in the mouse Cfc1 gene [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, 2**). See overview below.

Expected PCR product size: 153 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] Salomon D.S., Bianco C., Ebert A.D., Khan N.I., De Santis M., Normanno N., Wechselberger C., Seno M., Williams K., Sanicola M., Foley S., Gullick W.J. and Persico G. (2000) Endocr. Relat. Cancer 7(4): 199-226.

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

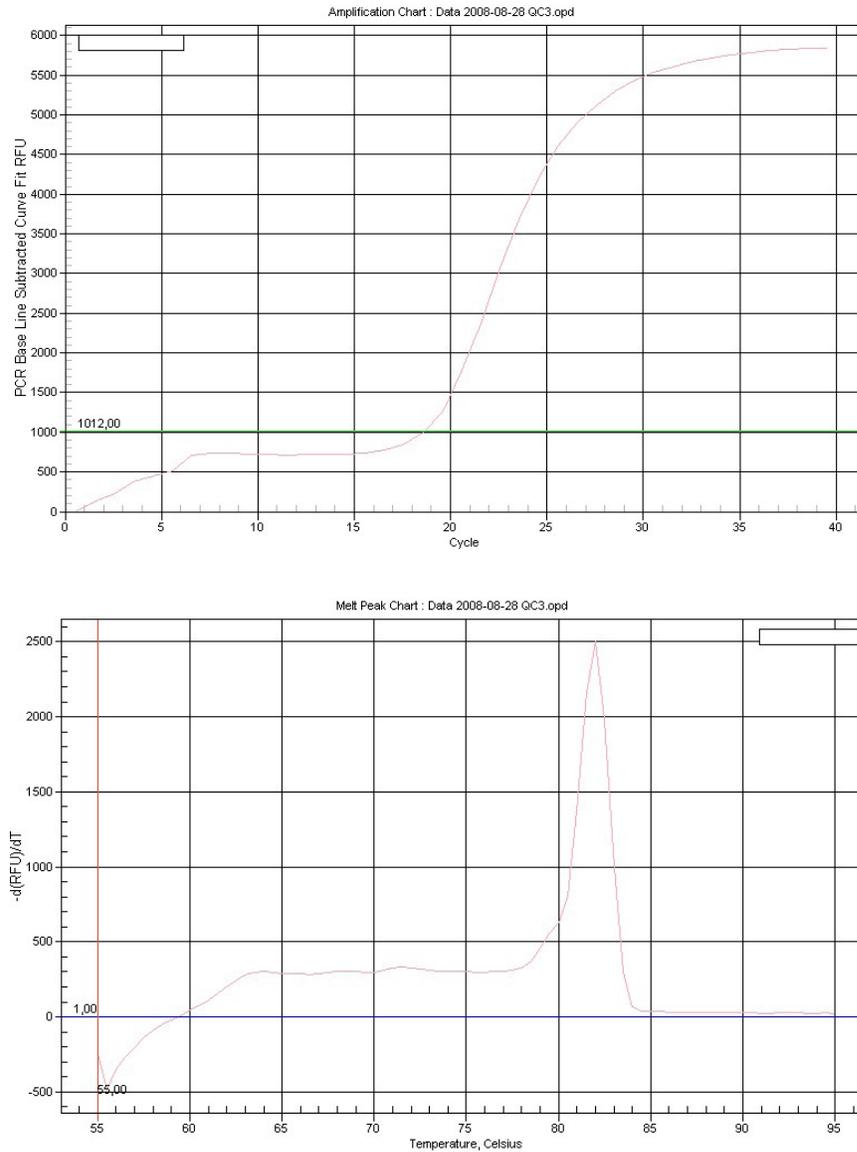


Figure 1

A fragment from 5' flanking region in the mouse *Cfc1* gene located at chr1:34592313-34592465 was amplified using the Diagenode primers (cat#: pp-1034-050, -500). PCR was run with 50 ng of mouse genomic DNA from 3T3 cell line in 25 μ l of final volume with 1 μ 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 pink. The melting curve is presented in the bottom panel.

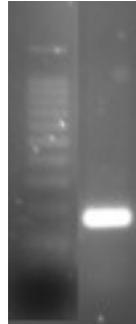


Figure 2

PCR product amplified with the Diagenode primers (cat#: pp-1034-050, -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 product from the 5'-flanking region of the mouse Cfc1 gene (153 bp).

Overview: The EGF-CFC gene family encodes a group of structurally related proteins that serve as important competence factors during early embryogenesis in *Xenopus*, zebrafish, mice and humans. This multigene family consists of *Xenopus* FRL-1, zebrafish one-eyed-pinhead (oep), mouse cripto (Cr-1) and cryptic, and human cripto (CR-1) and criptin. FRL-1, oep and mouse cripto are essential for the formation of mesoderm and endoderm and for correct establishment of the anterior/posterior axis. In addition, oep and cryptic are important for the establishment of left-right (L/R) asymmetry. In the mouse, cryptic is not expressed in adult tissues whereas Cr-1 is expressed at a low level in several different tissues including the mammary gland [2].