Design of GST Target-Specific Primers for Polymerase Chain Reaction

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Abstract: Bioinformatics is a science which may be defined as the interface between biological and computational sciences[1]. This knowledge can find an appropriate response to biological problems, using computational tools and systems. Primer design is one of these problems. Good primer design is one of the most successful steps in realtime PCR[2]. Oligo is an appropriate software for primer design. The sequence design for forward GST with length 22 mer and Tm 58.6 °C is ACT CAA AGC CTC CTG CCT ATA C and for reverse GST with length 21 mer and Tm 58.9 °C is GTC CTT CCC ATA GAG CCC AAG. In primer design several parameters including the length of the primer, %GC content and the 3' sequence is important[3]. A software packages such as Oligo can help to primer design with less troublesome, non-specific amplification or primer-dimer formation, can result in little or no product. For this reason primer design is an important step for a good realtime PCR.

Keywords: Primer; Design; Glutathione-S Transferase; Realtime PCR

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