

A Comparison of Three Site-Directed Mutagenesis Kits

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In this comparative study, three different mutagenesis kits, namely the MutaGene phagemid *in vitro* mutagenesis kit (Bio-Rad), the Transformerä Site-Directed mutagenesis kit (Clontech) and the Quik-change site-directed mutagenesis kit (Stratagene) were used for the mutagenesis of IPNS genes. However, a large difference in mutation efficiencies among these kits was encountered. Furthermore, these kits employ different strategies with its own individual strengths and weaknesses. Thus, a comparison among these three kits to evaluate their usefulness and improvements on the strategy adopted by the Quik-change site-directed mutagenesis kit, which was the kit of choice for our work, are presented for the benefit of research work.