

# Results Report

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A New DNA isolation technique was developed at HSapiens.inc. We evaluated the specificity to capture a set of Golden Genes without capturing the surrounding unwanted regions.

Sequencing depth was evaluated for a given set of 5 genomic loci. The following coverage values were found:

Gene Name	Breadth of coverage	Mean depth of coverage
GOLDEN_GENE1	82%	3.7X
GOLDEN_GENE2	91%	4.2X
GOLDEN_GENE3	64.6%	2.4X
UNWANTED_REGION1	100%	53.1X
UNWANTED_REGION2	97.5%	72.6X

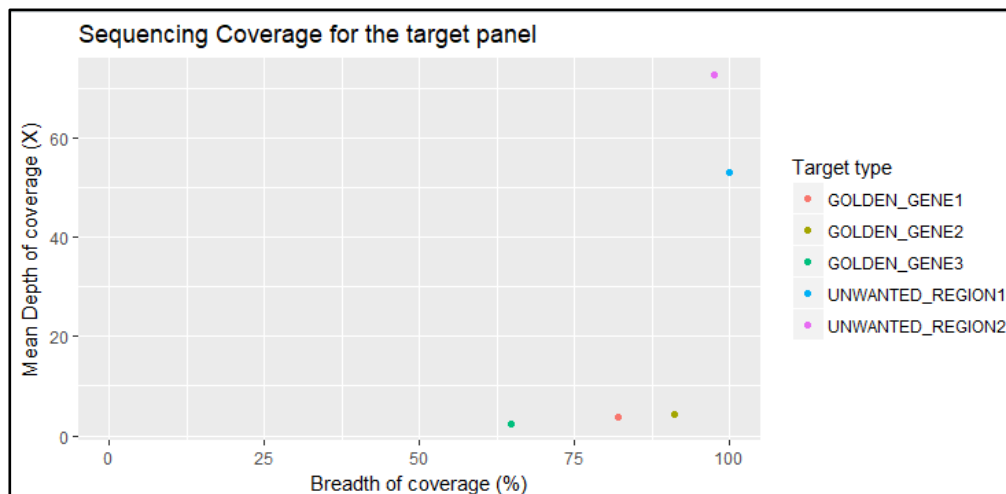


Figure 1. Comparison of coverage values for the targeted genes and the surrounding unwanted regions.

In average the panel of Golden Genes was 79.2% covered, at 3.4X; for the unwanted regions the average values were 98.75% covered, at 62.9X.

## Conclusions:

According to our observations:

- The proposed DNA isolation technique isn't functional for the targeted genes, because exist more copies of fragments belonging to unwanted regions.
- The DNA isolated from the Golden Genes are of worse quality than in the unwanted regions, because they are have a minor cover in the reads obtained.
- The proposed DNA isolation technique extract mainly DNA from the unwanted region. It is advisable to review the DNA isolation technique, in terms of the reagents that can separate the unwanted regions of the Golden Genes.