

The human proteom diversity is caused by the ability of a single gene locus to encode more protein isoforms. The TCF/LEF genes produce a broad spectrum of protein variants, which consequently leads to a great functional diversity of the TCF/LEF proteins. The TCF/LEF transcriptional factors regulate the canonical Wnt signaling target genes. In this diploma project we focused on the *Caenorhabditis elegans* gene *pop-1*, the ortholog of the *TCF/LEF* genes. Using the Northern blot analysis we tried to identify alternative isoforms of the *pop-1* mRNA in *C. elegans*. Using quantitative RT-PCR we also analyzed the *pop-1* mRNA levels.

Key words:

canonical Wnt signaling pathway, TCF/LEF transcription factors, *Caenorhabditis elegans*, *pop-1*