

***In silico* analysis of regulatory elements of WISP1 and orthologs. Regulatory Sequence comparisons with the coregulated CTGF gene.**

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WISP1 and CTGF are members of the CCN family of growth factors, which encode extracellular matrix proteins participating in several developmental and tumorigenic processes. WISP1 is induced by the Wnt signaling pathway. CTGF is the most studied member of the CCN family sharing common domains with WISP1. Expression analysis data indicated that WISP1 and CTGF are coregulated by Neurogenin3 (NGN3); a transcription factor directing the specification of the endocrine pancreas. WISP1 orthologs were identified from all currently available genomes, their promoter regions were searched for regulatory motifs and common transcription factor frameworks were identified. The respective CTGF orthologous peptides showed similar phylogenetic distribution with WISP1 proteins. Comparative genomic analysis of CTGF and WISP1 orthologs revealed the presence of a conserved enhancer in both CTGF and WISP1 regulatory regions. This enhancer contains binding sites for NGN3 and other transcription factors such as PDX1, HNF6 and HNF1, crucial for pancreatic development.