

Molecular cloning, sequence polymorphism and genomic organization of far eastern catfish (*Silurus asotus*) GH gene

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The far eastern catfish (*Silurus asotus*) growth hormone (GH) gene was cloned and characterized. The complete nucleotide sequences of genomic GH gene sequences as well as a catfish GH cDNA were obtained by RT-PCR and gene filter screening. The GH cDNA and genomic gene span 1.0 and 1.8 kb from the start codon to the polyadenylation signal, respectively. Both on cDNA and gDNA GH genes, the sequence polymorphism was detected including various silence mutations. The genomic GH gene comprised of only four exons and three introns, which was novel type of fish GH gene structure. The evolutionary relation of the catfish GH gene was inferred based on the comparative phylogenic analysis using the gene structures and sequences.

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