

MAPPING GENES ONTO CHROMOSOMES, AND ITS USE FOR ANTARCTIC FISH PHYLOGENY

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The relative positions in chromosomes of 5S rRNA genes, 28S rRNA genes and immunoglobulin genes obtained through fluorescent *in situ* hybridization technique are used as taxonomic indicators for resolving parts of the phylogenetic tree of Antarctic fishes, and more specifically the family Nototheniidae. Relative position of those genes support several interesting groups, among which a sub-group of *Trematomus* species. This work will show that FISH techniques can provide some phylogenetic characters at the sub-family level, and is suitable for highlighting some mechanisms of chromosomal changes.