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Titolo Vitellogenin in Fishes- Diversification, Biological Properties, and Future

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## Sommario/riassunto

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This book provides basic and advanced information on vitellogenin in fish. The proposed book discusses the history of vitellogenin, previtellogenesis, their diversification and classification in fishes, and tools for their identification and characterization. Further, their functional aspects in oogenesis and its regulatory mechanism, role as the immunocompetent molecule, and reproductive strategies are discussed. The book further examines vitellogenin as a hormone and biomarker, its related egg volk proteins, and its mechanism on molecular cloning and induction. In addition, the book discusses its role in the disruption of the endocrine system in fish, its biological activities, its multivalent mechanism in marine and freshwater fishes, and its impact on the growth of ornamental fishes. Moreover, this book elaborates on the multiple vitellogenin genes, each with unique promoter regions and varying sensitivity to induction by estradiol, and multiple Vtg proteins themselves, with variable degrees of posttranslational modification. As such, this book is helpful for researchers and students interested in the reproduction of fishes and reproductive biology...