

# Insights into Reproduction from the Crystal Structure of Sperm Receptor ZP3

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Species-specific recognition between egg and sperm constitutes the initial, essential step of fertilization. Understanding this event would increase our knowledge of human infertility and could pave the way to the development of novel non-hormonal contraceptives; however, despite 30 years of very active research, its molecular basis remains unclear. I will present recent crystal structures of glycoprotein ZP3, the component of the extracellular coat of eggs that acts as sperm receptor, and discuss what they tell us about the very first moments of conception, as well as reproduction in other organisms.