life

Supplementary material

The First Analysis of Synaptonemal Complexes in Jawless Vertebrates: Chromosome Synapsis and Transcription Reactivation at Meiotic Prophase I in the Lamprey *Lampetra fluviatilis* (Petromyzontiformes, Cyclostomata)

Sergey Matveevsky [1,*], Nikolay Tropin [2], Aleksandr Kucheryavyy [3] and Oxana Kolomiets [1]

[1] Vavilov Institute of General Genetics, Russian Academy of Sciences, Moscow, Russia; sergey8585@mail.ru (SM), olkolomiets@mail.ru (OK)
[2] Vologda branch of the Russian Federal Research Institute of Fisheries and oceanography, Vologda, Russia; nikolay-tropin1@yandex.ru (NT)
[3] Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow, Russia; kucheryavyy@sevin.ru (AK)
* Correspondence: s.matveevsky@vigg.ru (SM)

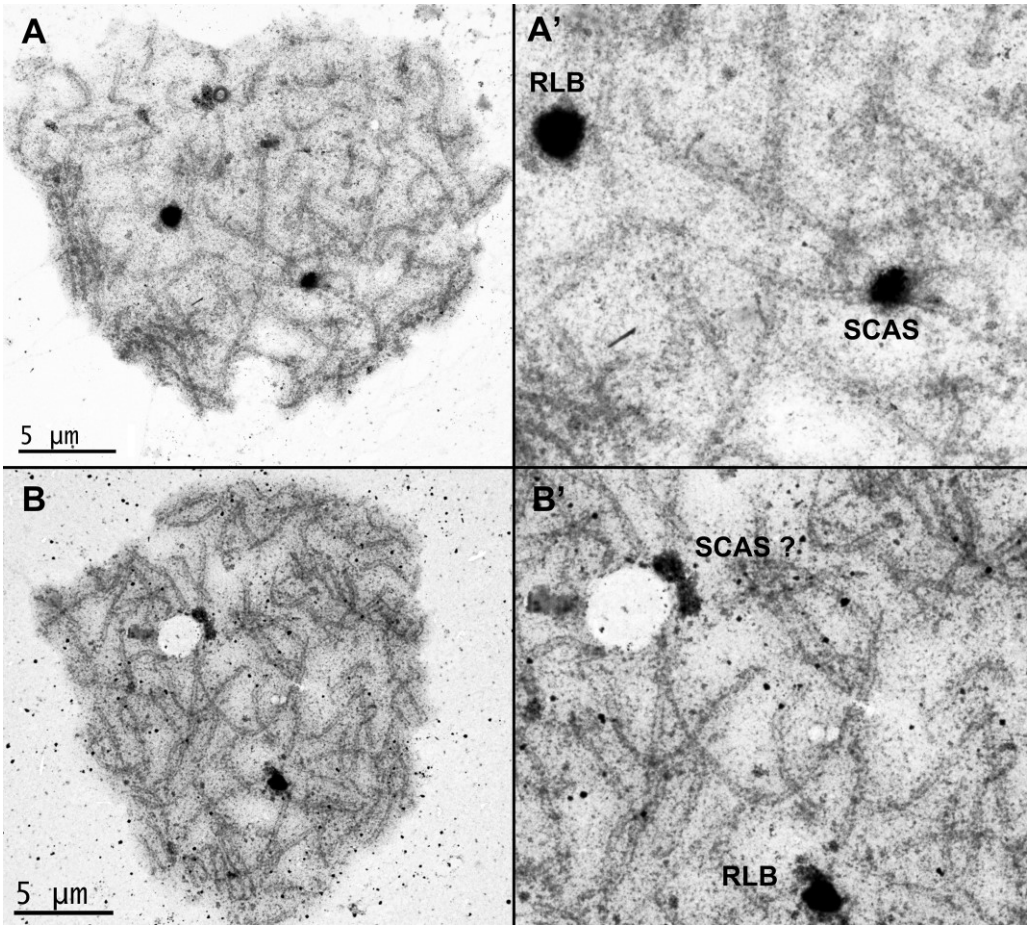

Figure S1. Electron microscopic microphotos of lamprey spermatocytes at the pachytene stage.

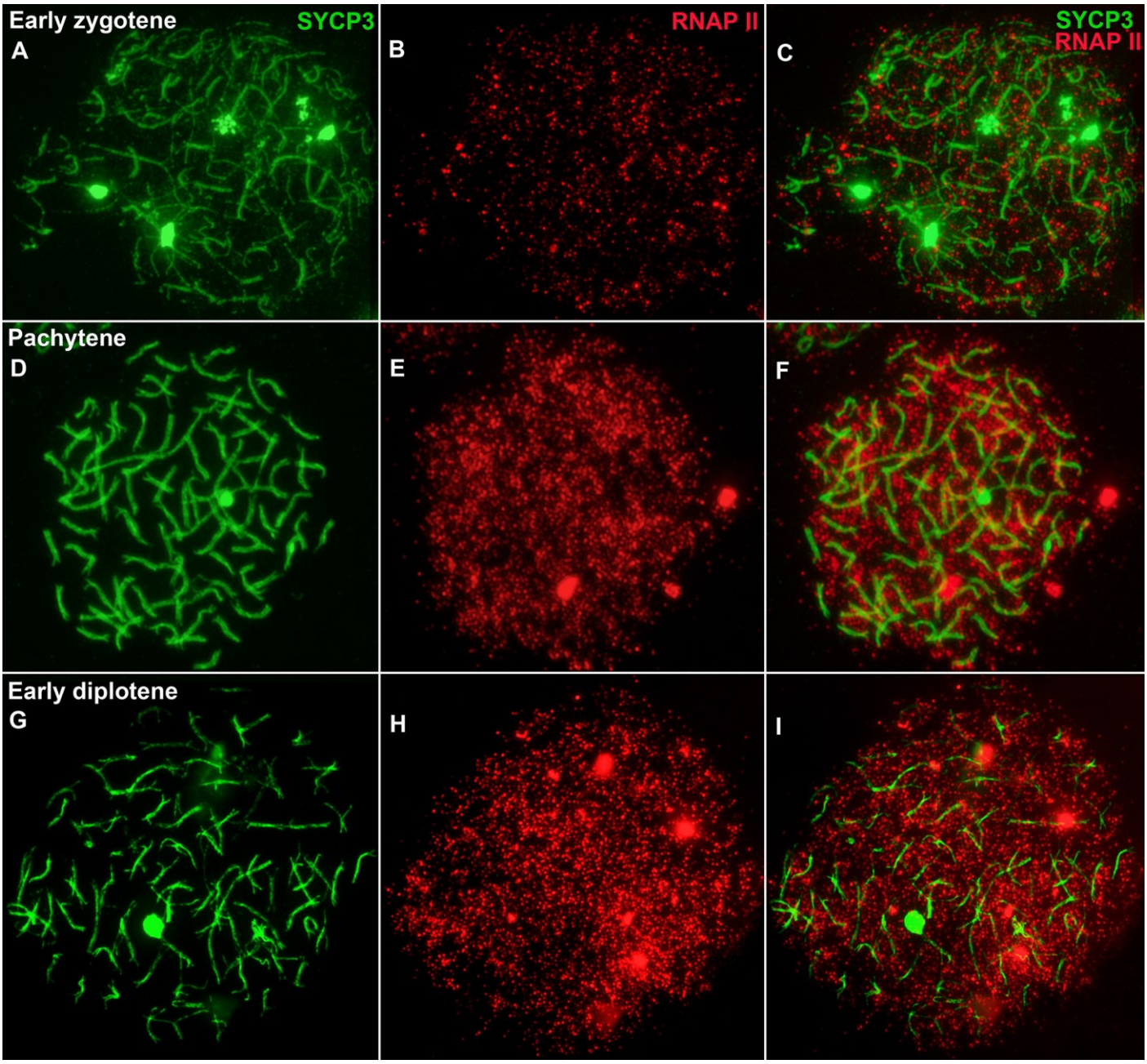

Figure S2. Immunolocalization of SYCP3 (green) and RNA polymerase (RNAPII, red) proteins in lamprey spermatocytes at the prophase I. **A-C.** Early zygotene (see Fig. 1C, C′); **D-F.** Pachytene; **G-I.** Early diplotene (see Fig. 1G, G′).

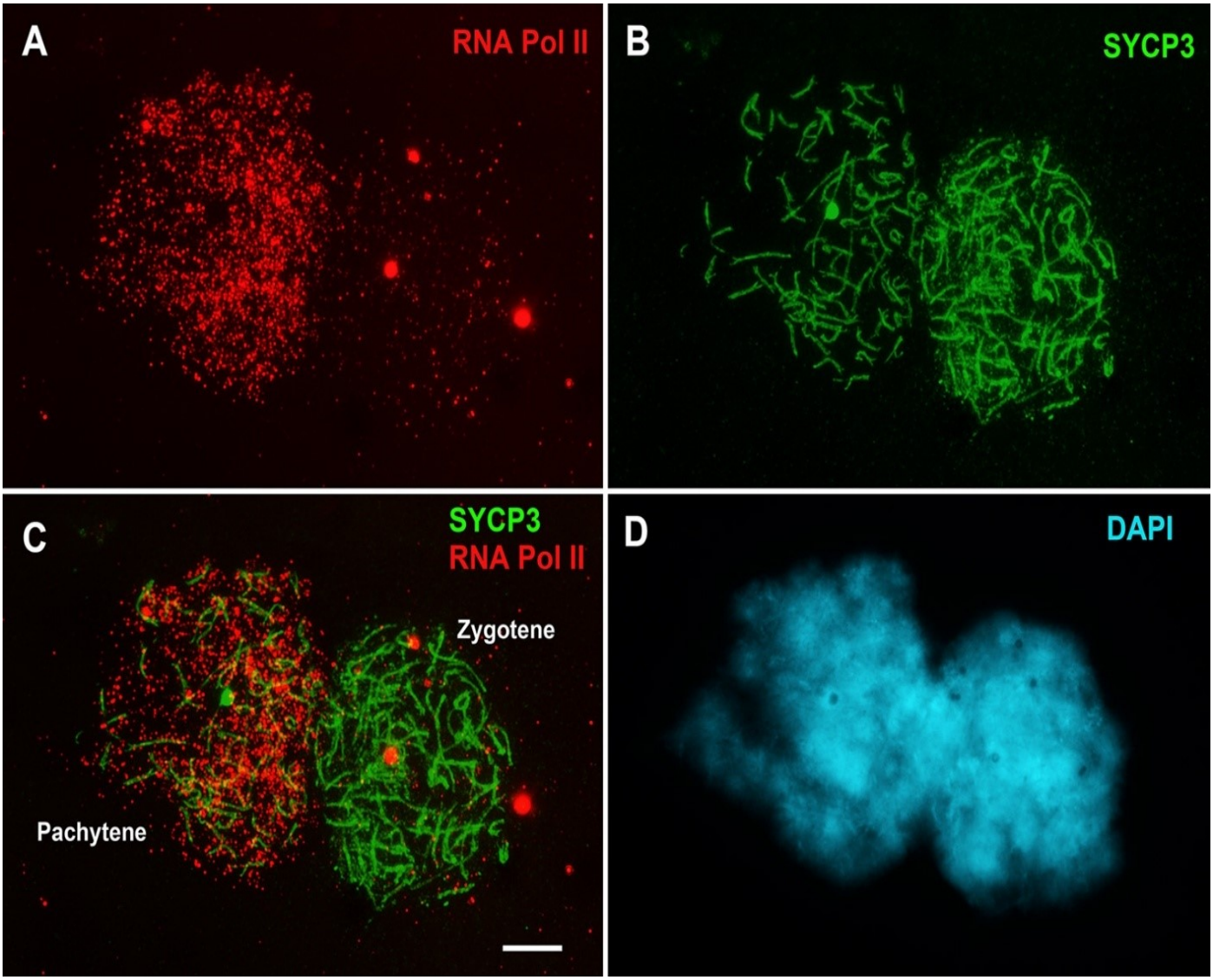

Figure S3. Immunocalization of SYCP3 (green) and RNA polymerase (RNA Pol II, red) proteins in lamprey spermatocytes at the zygotene and pachytene stages. Scale bars = 5 μm

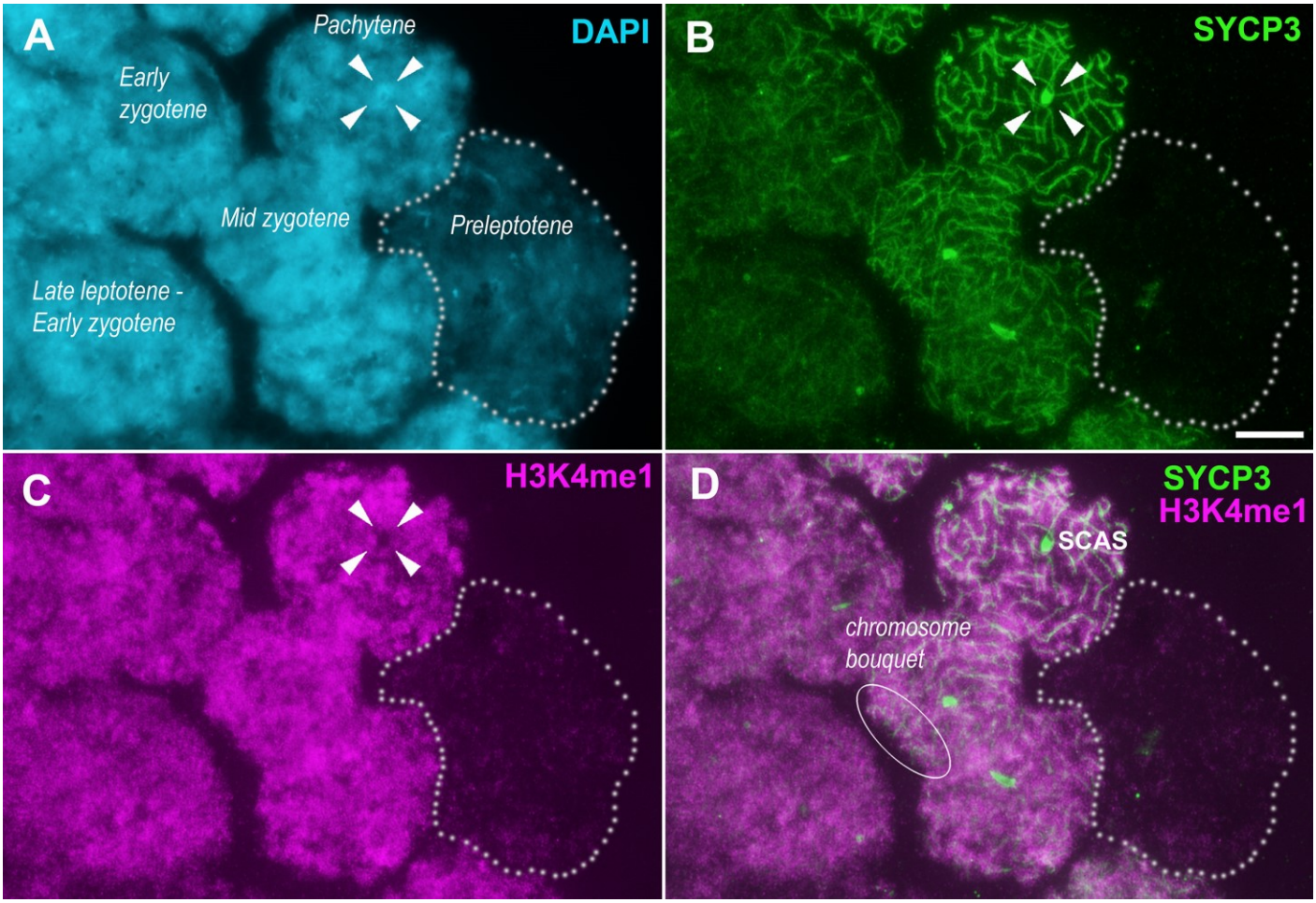

Figure S4. Immunolocalization of SYCP3 (green) and H3K4me1 (magenta) proteins in lamprey spermatocytes at different stages of prophase I. Scale bars = 5 μm

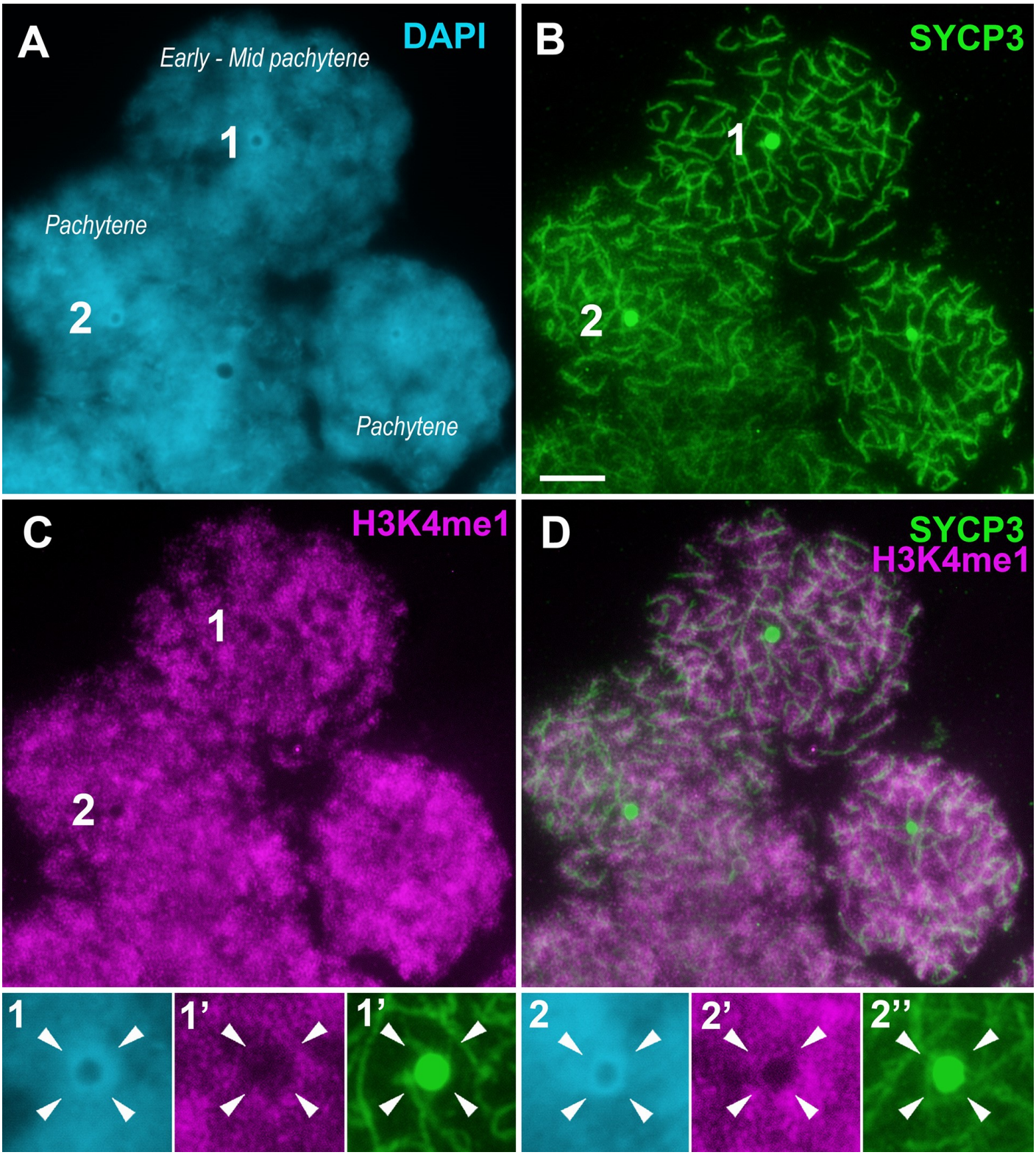

Figure S5. Immunolocalization of SYCP3 (green) and H3K4me1 (magenta) proteins in lamprey spermatocytes at different stages of prophase I. Scale bars = 5 μm

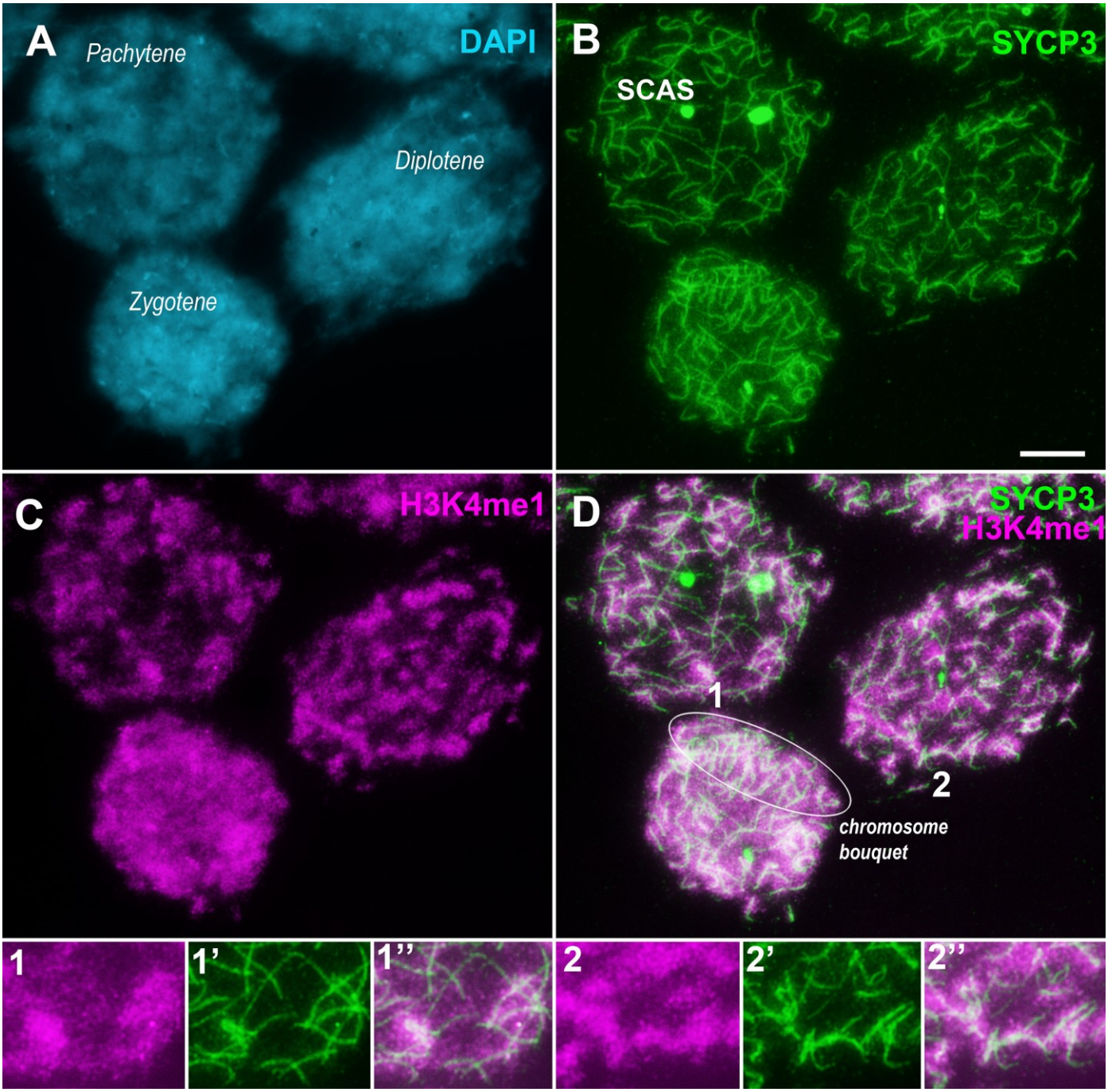

Figure S6. Immunolocalization of SYCP3 (green) and H3K4me1 (magenta) proteins in lamprey spermatocytes at different stages of prophase I. Scale bars = 5 μm