

Timing of appearance of novel macronuclear antigens during nuclear differentiation of *Paramecium caudatum*

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SUMMARY

We obtained two monoclonal antibodies specific for novel macronuclear proteins of the ciliate *Paramecium caudatum*. Using indirect immunofluorescence microscopy we show that the antigens appear in macronuclear anlagen after the heterochromatic aggregates disappear and then the anlagen increase in volume. We found that the antigens are always kept in the macronucleus and in the old macronuclear fragments until the beginning of the second cell cycle of the exconjugants. Cross-reactivity of the antibodies shows that the epitopes are present not only in strains of *P. caudatum*, but also in the strains of *P. jenningsi*, *P. multimicronucleatum*, *P. tetraurelia*, *P. putrinum* and *P. polycaryum* examined.