

The cortical sheets as an efficient tool to visualize the ciliary movements in gene-silenced *Paramecium*

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SUMMARY

Genes that encode proteins possibly related to ciliary structure, biogenesis or function have been identified using comparative genomics and proteomics. Several of these genes are under study using the RNAi feeding method. To analyze ciliary movements in gene-silenced *Paramecium tetraurelia*, observation of reactivated cilia on cortical sheets could be useful. However, ciliated cortical sheets have previously been prepared only from *Paramecium caudatum*. We attempted to prepare ciliated cortical sheets from the smaller *Paramecium tetraurelia* and reactivate the cilia in various conditions. The reactivated cilia showed basically the same responses as those of *Paramecium caudatum*. We have used the cortical sheets from gene-silenced *Paramecium tetraurelia* in preliminary tests.