

Purification and molecular characterization of the pellicle and plasmalemma of *Neospora caninum*

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Abstract

Using methods for the subcellular fractionation of tachyzoites grown *in vitro*, we prepared fractions containing pellicles and plasmalemma from both *N. caninum* and *T. gondii*. The success of the purification methodology was followed by electron microscopy. The proteins and antigens present in the fractions were subsequently studied by SDS-PAGE and Western blotting. Analyses revealed that the pellicle fractions contained many different proteins. In contrast plasmalemma of *N. caninum* contained two abundant proteins in addition to a number of

low abundance antigens detectable by monoclonal antibodies. One of the abundant proteins could be identified by Western blotting as a SAG1 homologue. These studies therefore report for the first time, an evaluation of the methods for the preparation of membranes plus a detailed molecular characterisation of the pellicle and plasmalemma of *N. caninum*.

Lei Y., Birch D., Davey M. and Ellis J.T. (2005) Subcellular fractionation and molecular characterization of the pellicle and plasmalemma of *Neospora caninum*. *Parasitology* (in press)