

CHARACTERISATION OF GLYCOINOSITOLPHOSPHOLIPID (GIPL) OF
TRYPANOSOMATID *CRITHIDIA DEANEI*

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Crithidia deanei is a monoxenic trypanosomatid that harbors a bacterium-like endosymbiont within the cytoplasm. This endosymbiont is integrated to the protozoan physiology in a way that its cell division is synchronized to the host cell cycle. *Crithidia* spp. are non-human parasites, which have the ability of easily growing in axenic cultures, sharing several metabolic pathways with higher eukaryotes. *Crithidia* spp. have been widely used as models for several studies in biochemistry, cell biology, genetics and glycobiology. In the present study, we purified the cell surface glycoinositol-phospholipid (GIPL) from *C. deanei* by phenolic/water and chloroform/methanol/water extractions. The phosphoinositol (PI) oligosaccharide was obtained after alkaline degradation from GIPL which releases its lipid moiety and purified by gel filtration chromatography. The PI-oligosaccharide composition was fully determined by gas-liquid chromatography and mass spectrometry (ESI-MS/MS). Our analyses demonstrate the presence of mannose, fucose, glucose, and N-acetyl glucosamine, in a molar ratio of 2:4:5:1, respectively. This finding strongly suggests that the GIPL of *C. deanei* may differ from other monogenetic trypanosomatids due to the presence of fucose residues.

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