PARTIAL PURIFICATION AND CHARACTERIZATION OF A Ca^{2+}-ATPASE FROM *Pachymerus nucleorum* LARVAE BY FREEZING

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We have recently obtained a high Ca^{2+}-ATPase activity fraction from *Pachymerus nucleorum* larvae. Analisis in SDS-PAGE show three main polypeptides: a high molecular weight polypeptide similar to myosin heavy chain, 57 e 45kDa. The Ca^{2+}-ATPase activity of this fraction do not show stimulation by calmodulin and inhibition by thapsigargin (140 µM) or ouabain (1,7 mM). It do not have Mg^{2+}-ATPase activity and show only low K^{+}-EDTA-ATPasic activity levels. There is little alteration of the Ca^{2+}-ATPasic activity by aluminum, fluor, or aluminum fluoride. Vanadium (200 µM) caused a inhibition in the activity of 52%. Azide (1mM) and Triton X-100 (0,2%) do not inhibit the Ca^{2+}-ATPasic activity. This enzyme does not hidrolises AMP, GTP and PPi, and has only a very low ADPasic activity (16%). AMP, GTP and PPi (1 mM) caused a little inhibition of the Ca^{2+}-ATPasic activity (about 30% inhibition). Besides the fact that there is no Mg^{2+}-ATPase activity in this fraction, the Ca^{2+}-ATPasic activity suffered strong inhibition (90%) by Mg^{2+} (0,5 mM), and is also inhibited (45%) by Cu^{2+} (1mM), what do not happened with Fe^{2+}, Co^{2+} and Zn^{2+}. In that work we obtained a thapsigargin non-sensitive Ca^{2+}--ATPasic activity from *Pachymerus nucleorum* larvae and we partially characterized it.

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