COMPARATIVE PROTEOME OF *VIBRIO CHOLERAE* AMAZONIA AND AN HLYU MUTANT.

LEME, J. M. M., Vieira, M. D., Santos, E. O., and Coelho, A.
Proteomics Network of Rio de Janeiro - FAPERJ
Departamento de Genética, Instituto de Biologia, UFRJ
jbiosapiens@hotmail.com.br; coelho@biologia.ufrj.br

Vibrio cholerae Amazonia is a strain isolated from cholera patients in Northern Brazil in 1991. It lacks the cholera toxin, but is cytotoxic and causes diarrhea by unknown mechanisms. Previous work demonstrated hemolytic activity, related with the *hlyA* gene, and regulated by *hlyU*. An insertion Amazonia *hlyU* mutant was constructed. In this work proteomics maps for the wild type Amazonia strain and the *hlyU* mutant. were obtained. These proteome maps were prepared from cellular and filtered supernatant proteins, using bidimensional gel electrophoresis. Protein identifications were performed with mass spectrometry, specifically with the MALDI-TOF and MALDI-TOF/TOF equipments. In the comparison of wild type Amazonia and the *hlyU* mutant, 231 spots were detected only in Amazonia, 175 only in *hlyU* and 154 in both. 120 spots were analyzed with mass spectrometry, resulting in 96 cellular proteins recognized: 52 from the wild type strain and 44 from *hlyU* mutant. In the complete gel set, several glycolysis and TCA cycle proteins were identified. Some of the abundant proteins are carbonic anhydrase, LuxS, ribosomal factors, OmpA, some hypothetical proteins and other metabolic proteins. Analysis of the filtered supernatant was performed only for the Amazonia wild type strain and revealed 61 spots, with 11 identified proteins, including flagellins, OmpV and OmpU.

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