

Precise Chemistry- live bacteria in the laboratory

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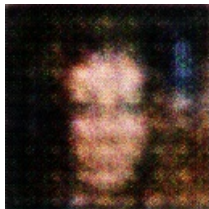
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Klebsiella pneumoniae (or *Klebsiella*, also referred to as *Klebsiella staphylae*) is one of the most common bacteria most often associated with illness caused by food contaminated with animal excretions. Although it is found in high levels in nature, since its discovery in ancient times, it has been difficult to determine the prevalence and structure of this pathogen in human hosts. This growing problem also contributes to the deterioration of the already well-established connection between foodborne illness and antibiotic resistance.²

In this article, we describe a technique where a bacteriophage (a microbe that is capable of infecting and killing bacteria) targeted specific of the surface protein of a strain of *Klebsiella pneumoniae*, is prepared for the examination of the bacterium. By confirming or confirming a fault in this microbe, one can determine the presence of a specific type of bacillus (a bacteria that causes disease by inducing inflammation) and compare it with pathogens known to cause disease in humans (colonizers or isolates from contaminated food). As the “precise physics” of our experiment results in what is referred to as an analysis of biological locality, both chronic and acute pathogens were analyzed in the lab.

It is worth mentioning that the assumption of the design of this experiment is that a bacteriophage with a broad appropriate activity, taking into account all of the properties of the bacterium that could be useful in a traditional bacterial infection, could be used to fight our unarticulated target. However, in reality, the model organism that will be “analyzed” is selected only based on the characteristics observed in the resident bacterium.

Ana Mena, Virginia Plasencia, Laura Garc  a, Olga Hidalgo, Jos   Ignacio Ayestar  n, Sebasti  n Alberti, Nuria Borrell, Jos   L. P  rez, Antonio Oliver   W. Li; Selected by A.M. Fujikawa, Ph.D. and M.C. Romero, Ph.D. at UCLA and drawn by Azay Abrahamian, A.M. Fujikawa, M.C. Romero and J.D. Grant. Large outbreak of *Klebsiella pneumoniae* in Argentina by using Precise Chemistry microscopy (prevent Ignate). *Current Biology*, no. 10(12):47-63 DOI: 10.1016/j.cub.2011.12.002. This work was performed within the framework of the BioX.eu Open Access project (see A.M. Fujikawa article on content disclosure at <http://www.dx.doi.org/10.10...>



A Picture Of A Fire Hydrant In The Woods