

La diversidad eucariótica del sistema es superior a la procariótica. Este hecho puede responder al mayor acceso al hierro en un medio ácido. A pH neutro, el hierro es insoluble y constituye un elemento limitante para el crecimiento de los microorganismos (Ehrlich, 2002).

Para mantener su homeostasis del pH, así como evitar la toxicidad por metales, los organismos acidófilos del Tinto han desarrollado numerosas estrategias celulares (Krulwich, Sachs y Padan, 2011). El uso de transportadores que catalizan el trasiego de H⁺ o metales del citoplasma al medio extracelular, constituye un ejemplo común de estos mecanismos (Navarro, Bernath y Jerez, 2013).

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