IMMUNOHISTOCHEMICAL EXPRESSION OF HNK-1 IN THE TAIL BUD OF GALLUS GALLUS DOMESTICUS EMBRYOS

Gustavo C. L. Freire¹, <u>Naisandra B. Silva</u>¹, Carlos A. Barboza¹, Carlos E. Moura¹, Fermín V. Tirado², Ángel P. Melián²

¹ Departamento de Morfologia, UFRN, Brazil; ² Universidad Complutense de Madrid, Spain

One of the most interesting ontogenetic processes is the secondary morphogenesis, the development of the caudal region of the embryo from a primary structure known as the tail bud, which is formed after the caudal neuropore closure. The origin of this zone is controversial: it can be developed from a homogeneous and pluripotent mass that suffer differentiation into several tissues, or yet a heterogeneous mass containing distinct cell populations with multiple differentiation potentials, similar to what happens during gastrulation. We performed immunohistochemical reactions using the monoclonal antibody HNK-1 to stain the tail bud of *Gallus gallus domesticus* embryos in stages 14 and 18 HH (Hamburger-Hamilton). The results showed that a small portion of the tail bud - the caudal end - expressed the epitope, which was also present in primitive streak cells that migrated down into the embryo before the 14 HH stage. The findings suggest that the tail bud is a heterogeneous structure, although it presents a homogeneous morphology. Furthermore, these cells are probably reminiscents of the primitive streak that persist in the embryo body until at least the 18 HH stage. This fact indicates that gastrulation takes place in the embryo even after the closure of the caudal neuropore.

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