

## Expression of TLR7 in the murine eye during the embryonic period and in the adult animal

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In the present study, we evaluated Toll-like receptor 7 (TLR7) expression at different stages of the murine eye development and in the adult organ. In mammals, TLRs are best known for their immunitary function, however data from the literature are demonstrating that in analogy to their *Drosophila* homologue Toll, they also participate in developmental mechanisms (Okun, Griffioen and Mattson 2011, Shechter et al. 2008). Immunohistochemistry for TLR7 and double immunofluorescence for TLR7/PCNA were performed on E12, E14 and E16 formalin-fixed paraffin-embedded mouse heads and on eyes enucleated from 3 months adult mice

Results of experiments indicate that TLR7 expression is present in different compartments of the mouse eye (cornea, pigmented epithelium, neural retina, and lens) during gestation both in proliferating and differentiating cells and that such expression persists also in the adult organ.

These observations indicate that besides being involved in protective mechanisms in the adult eye, TLR7 is also likely involved in the morphogenetic processes of this complex organ to which cells and tissues of different embryological origin contribute.

### References

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