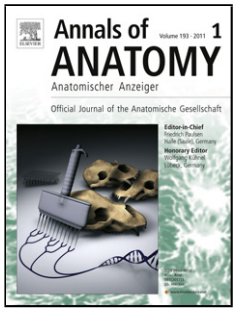

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Localization of cholecystokinin in the zebrafish retina from larval to adult stage Guerrera

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Abstract

The peptide hormone cholecistokinin (CCK) plays a key role in the central and peripheral nervous system. It is known to be involved in the digestive physiology and in the regulation of food intake. Moreover, the CCK expression has also been detected in the retina of different vertebrates, including fish, although its biological activity in this tissue remains to be elucidated. In literature no data are yet available about the CCK-immunoreactivity in the zebrafish retina during development. Therefore, the aim of the study was to investigate the distribution of sulfated cholecystokinin octapeptide (CCK8-S) as a well preserved form during evolution in the zebrafish retina from 3 days post hatching (dph) until adult stage, using immunohistochemistry in order to elucidate the potential role of this protein in the development and maintenance of normal retinal homeostasis. The cellular distribution of CCK in the retina was similar from 3 dph to 40 days post fertilization (dpf) when