Short Communication

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Collapsin response mediator protein-1 expression at subcellular resolution during zebrafish nervous system development

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Abstract

Collapsin response mediator proteins (CRMPs) are cytosolic phosphoproteins that are functionally important during vertebrate development. We have generated a zebrafish gene trap line that produces fluorescently tagged Crmp1 protein, which can be dynamically tracked in living fish at subcellular resolution. The results show that Crmp1 is expressed in numerous sites in the developing nervous system. Early expression is apparent in the forebrain, epiphysis, optic tectum and the developing spinal cord. In the larval brain, Crmp1 is expressed in several distinct brain regions, such as the telencephalon, habenula and cerebellum. In addition, it is expressed in the spinal cord in a manner that persists in the larva. The results suggest that this Crmp1 protein trap line offers a powerful tool to track selected neuronal populations at high resolution.

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Biography

Marianne Bronner California Institute of Technology, MC 139-74, 1200 E., California Blvd., Pasadena, USA. Mohamed E has served on many review panels, has reviewed for many journals. Marianne Bronner has over many peer reviewed publications and is funded by several foundations.