

Localization of Retinal Ca²⁺/Calmodulin-dependent Kinase II-β (CaMKII-β) at Bipolar Cell Gap Junctions and Cross-reactivity of a Monoclonal Anti-CaMKII-β Antibody with Connexin36

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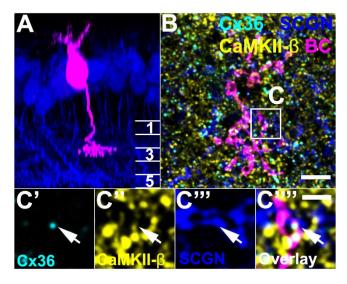
Running title: CaMKII- β and retinal gap junctions

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1 Supplementary Figures and Tables

1.1 Supplementary Figures



Supplementary Figure 1. CaMKII- β may regulate inter-bipolar cell gap junctions. (A) XZ rotation of an Alexa568-injected type 5 bipolar cell (BC), immunolabeled for secretagogin (SCGN). Numbers and lines indicate the different layers of the inner plexiform layer. (B) XY view, showing the axon terminal of the same cell in the retinal whole-mount, labeled for connexin36 (Cx36), CaMKII- β and SCGN. The area marked by the white square is shown in higher magnification as single confocal scan in C'-C''''. (C'-C'''') Cx36 colocalized with CaMKII- β at a contact point of two bipolar cell dendrites in layer 3 of the inner plexiform layer. It presumably represents heterologous coupling between different type 5 bipolar cell subtypes (Tsukamoto and Omi, 2017). Scale bar: B, 5 µm, C'-C'''', 2 µm.

2 Supplementary References

Tsukamoto, Y., and Omi, N. (2017). Classification of Mouse Retinal Bipolar Cells: Type-Specific Connectivity with Special Reference to Rod-Driven AII Amacrine Pathways. *Front Neuroanat* 11, 92. doi:10.3389/fnana.2017.00092.