SUPPLEMENTARY MATERIAL

Synaptic pathology, plasticity and therapeutic repair in the retina of adult Rs1-KO mouse by RS1 gene transfer

J. Ou [1]*, C. Vijayasarathy[2]*, L. Ziccardi[2†], S. Chen[1], Y. Zeng[2], D. Marangoni[2], J. G. Pope[1¶], R. A. Bush[2], Z. Wu[3],W. Li[1], P.A. Sieving[2,4‡]

SUPPLEMENTARY MATERIALS

Supplemental Table 1. Buffers used in Calcium Imaging

Supplemental Table 2. Antibodies used in immunohistochemistry and Western Blots

Supplemental Figure 1. Synaptic protein expression profile in WT and *Rs1*-KO mice retinas at P22.

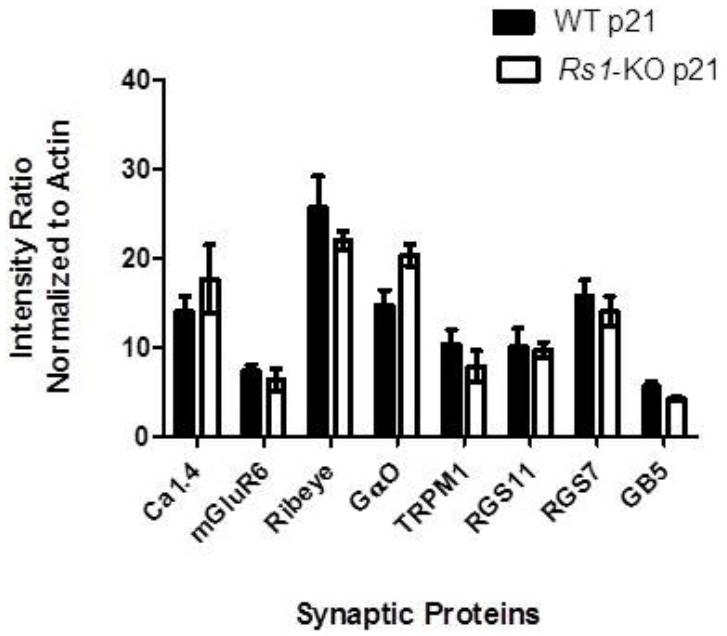
Supplemental Table. 1. Buffers used in Calcium Imaging

Components (in mM)	3mM Ca^{2+}	0 mM Ca^{2+}	20 mM Ca^{2+}
NaCl	100	95	70
$CaCl_2$	3	2	20
KCl	5	5	5
$MgCl_2$	3	3	3
Glucose	10	10	10
$NaCHO_3$	25	25	10
All buffers have the osmolarity of 285±5.			

Supplemental Table 2. List of Antibodies used in Immunohistochemical Detection and Western Blot Analysis: Antibody Type, host species, source and dilutions used in this study.

Antibody name	Species	Source	Dilution
RS1	Guinea Pig	Custom-made	1:1000
Gαo	Mouse	Millipore, MAB3073	1:1000
TRPM1	Rabbit	Takahisha Furukawa, Osaka Bioscience Institute, Osaka, Japan	1:300
CtBP2/RIBEYE	Mouse	BD Biosciences, 612044	1:500
CaV1.4	Sheep	Catherine W. Morgans, OHSU, Portland, OR	1:300
Protein bassoon	Rabbit	Covance, Custom-made	1:1000
GPR179	Mouse	Yomics, AB0887-YOM	1:200
mGluR6	Sheep	Catherine W. Morgans, OHSU, Portland, OR	1:300
PKC	Mouse	Sigma, P5704	1:2000
VGluT1	Guinea Pig	Millipore, AB5905	1:1000
Gβ5	Goat	Theodore G. Wensel, BCM, Houston TX	1:1000
RGS7	Rabbit	Theodore G. Wensel	1:1000
RGS11	Rabbit	Theodore G. Wensel	1:1000

Supplemental Figure 1. Synaptic protein expression profile in WT and *Rs1*-KO mice retinas at P22.



Quantitative results of Western blot analyses of synaptic protein expression levels in WT and *Rs1*-KO mice at P22. Intensities of immunoreactive bands on Western blots were quantified for protein expression with Odyssey Imaging Software (Li-Cor Biosciences) and normalized to β-actin signal intensity. There were no significant differences in the quantities of synaptic proteins between the wild-type and the *Rs1*-KO mice. Values represent Mean ±SEM from three different experimental samples and each is a pool of 2 retinas from two different mice.