Correction

In the article, "Role of Neurotrophin Receptor TrkB in the Maturation of Rod Photoreceptors and Establishment of Synaptic Transmission to the Inner Retina," by B. Rohrer, J. I. Korenbrot, M. M. LaVail, L. F. Reichardt, and B. Xu, which appeared on pages 8919–8930 of the October 15, 1999 issue, a corrected version of Table 1 is printed.

Table 1. Dimensions and visual pigment content of the photoreceptors

						Visual pigment		
Animals	Rod density (no. per mm^2)	ROS diameter (μm)	ROS length (μm)	ROS volume (μm^3)	Packing density	Amount per eye (nmol)	Concentration (nmol/μm^3)	Rod axial absorbance[a]
P16 WT	5.06×10^5	1.26 ± 0.32	14.04 ± 1.69	17.51 ± 1.71	0.63	0.1720 ± 0.030	0.00982 ± 0.0017	0.869
P12 WT	7.16×10^5	1.06 ± 0.26	6.42 ± 1.37	5.67 ± 1.50	0.62	0.0493 ± 0.011	0.00869 ± 0.0019	0.351
P16 KO	6.90×10^5	1.11 ± 0.30	6.34 ± 1.49	6.14 ± 1.51	0.66	0.0563 ± 0.010	0.00917 ± 0.0016	0.366

Rod density was derived by counting rows of rod nuclei per millimeter from 1 μm plastic sections. Rod outer segment width and length were measured from freshly dissociated photoreceptors, using a calibrated reticule. Those numbers were used to derive the total volume of the photoreceptors and their packing density (area of the mask minus the area of all the photoreceptors in the mask). Visual pigment concentration of the entire retina was derived from the color measured per mask area, a value that could then be used to determine the concentration of visual pigment per cubic micrometer and the resulting rod axial absorbance. Note that the values derived for the P12 and the P16 KO are virtually indistinguishable and significantly different from the P16 WT animals.

[a] Absorbance = $\epsilon \times c \times l \times 3/2$; ϵ, extinction coefficient for mouse rhodopsin (4.2×10^4); c, concentration of rhodopsin (nmol/μm^3); l, ROS length (cm), 3/2, orientation factor (Witkovsky et al., 1997).