**Supplementary Figure 1**

**Figure S1. Left:** Vertical projection of the confocal image of the amacrine cell in Fig. 4c, superimposed on its receptive field as measured by reverse correlation (see Methods).

**Top Right:** Vertical projection of the region of the soma, showing dendritic tuft.

**Bottom Right:** Horizontal projection. Poly-axonal branches arborized in a narrow layer, distinct from the dendritic tuft. INL, inner nuclear layer; IPL, inner plexiform layer; GCL, ganglion cell layer.