



Figure S1. Quantification of fMRI activations for the overall visual cortex. Using the patch of interest (POI) function in BrainVoyager QX clusters of activations are automatically extracted and a number assigned to each patch. Using the POI tool characteristics of each patch (cluster of activation) such as area of activation, coordinate of the centroid of the activation cluster and statistical significance of the cluster is obtained. Area of activations for all clusters located in the left and right hemispheres are then summed to arrive at the total hemispheric activation. Sum of the areas of activations for the left and right hemisphere is then calculated for the total visual cortex activations. Images A, B, and C demonstrate different patterns of activation distribution over the whole visual cortex of one hemisphere for three different LCA2 patients to demonstrate variability of activations among subjects.