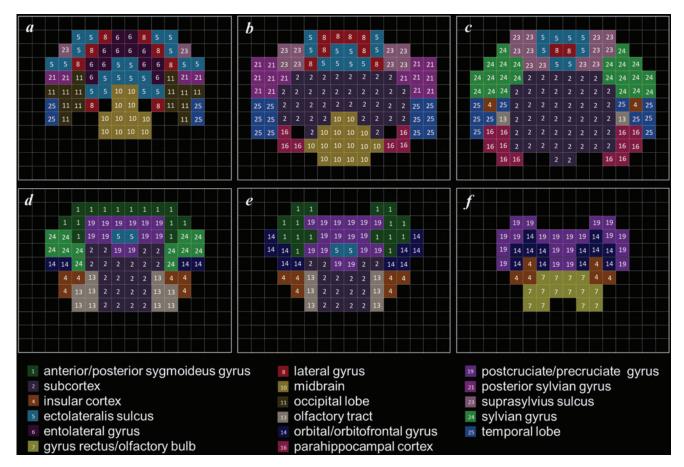
## **Supplementary Data**



**SUPPLEMENTARY FIG. S1.** Identification of specific brain regions as shown in a sheep brain atlas. The identified regions from the anatomical atlas<sup>17</sup> were rescaled to the resolution of the chemical shift imaging (CSI) datasets used for temperature mapping. The numbering of the regions used here is the same as that used in the high-resolution anatomical atlas. Some of the small regions in the high-resolution anatomical atlas, however, were combined in the CSI atlas reducing the number of regions from 53 to 17. Therefore, the numbering of the regions is not continuous because, when several regions were combined into one, we named the combined region using the name of the largest original region.