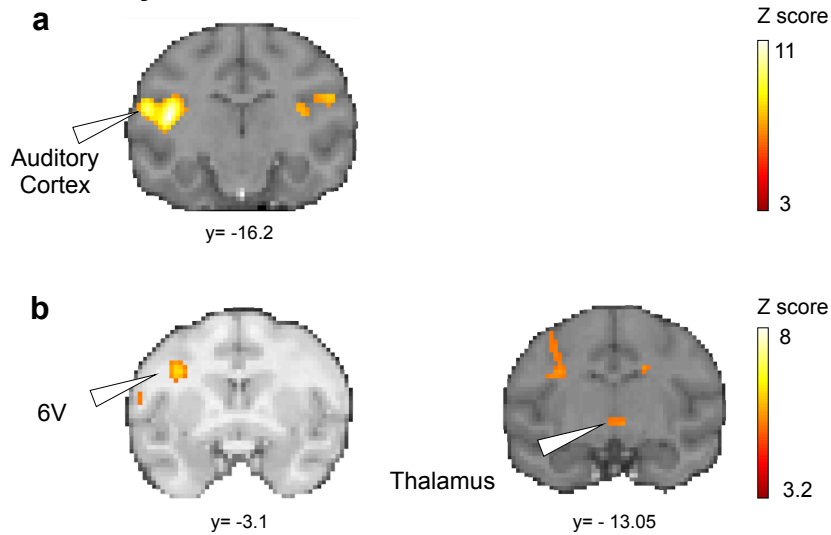


## Monkey K

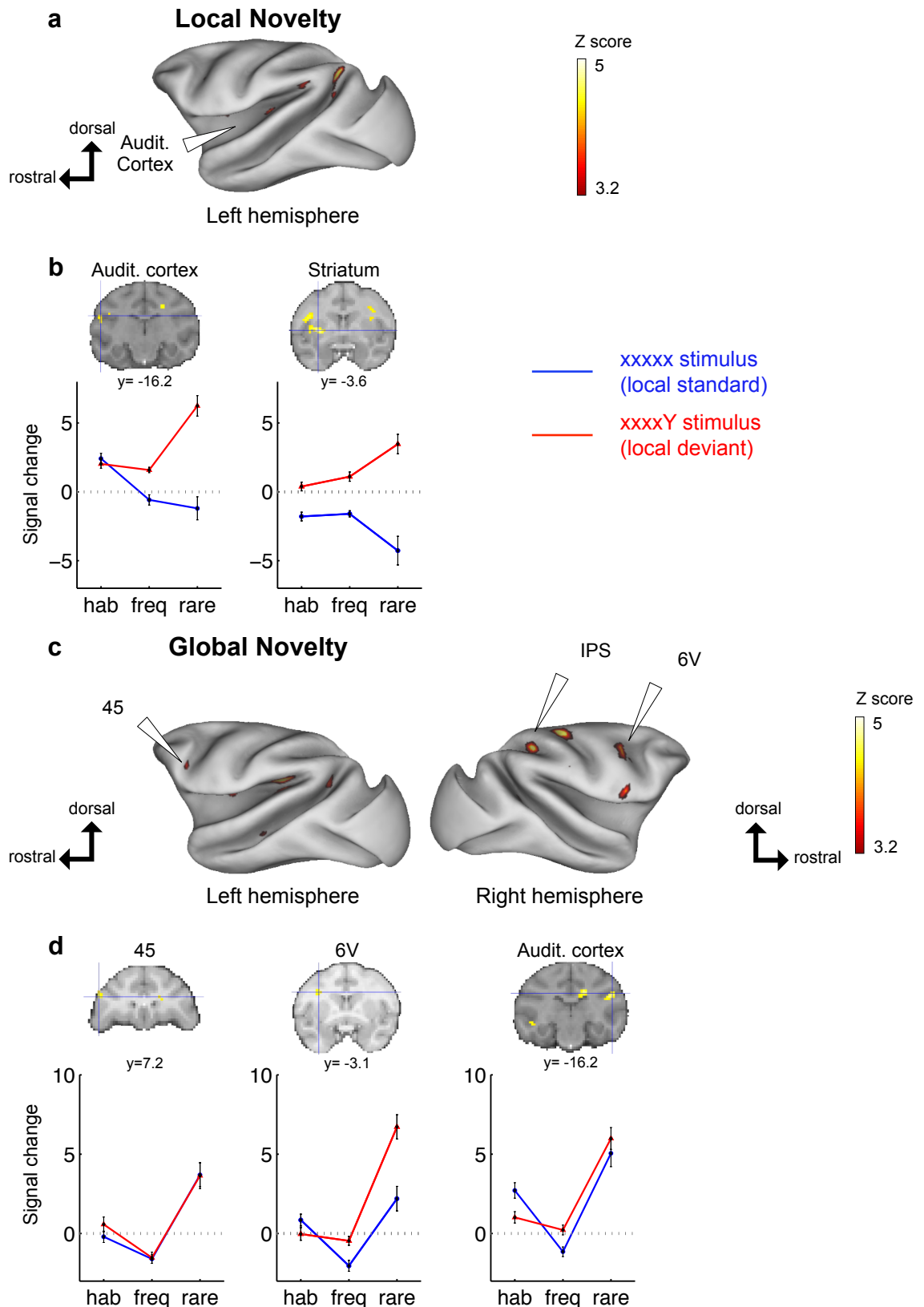


### fMRI activations for auditory stimuli

(a) T-score maps for all sounds overlying coronal T1-weighted images from the macaque MNI atlas. ( $p < 0.05$ , corrected by FDR). y, level of coronal section relative to the bregma in the Paxinos atlas: auditory cortex

(b) T-score maps for rare sounds overlying coronal T1-weighted images from the macaque MNI atlas. ( $p < 0.05$ , corrected by FDR). y, level of coronal section relative to the bregma in the Paxinos atlas: 6V (F5), thalamus

## Monkey K



### fMRI activations for local and global novelties

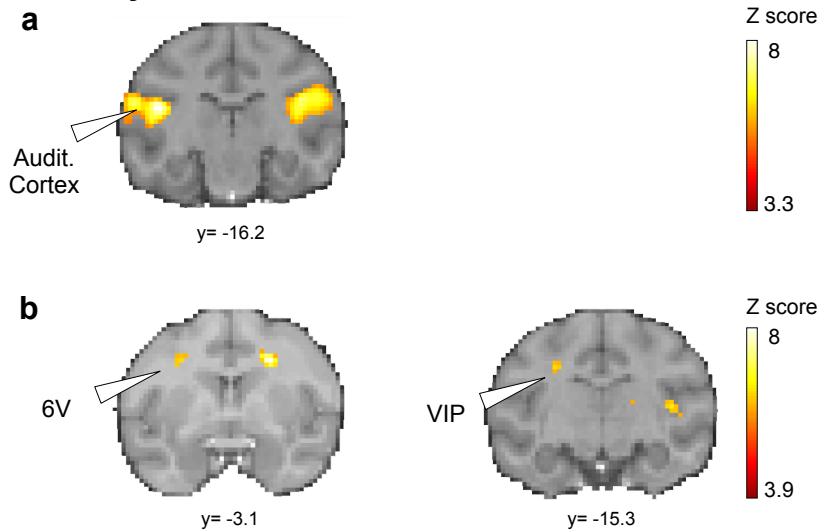
(a) Activation maps (local contrast: local deviant minus local standard). Activations are displayed on the cortical surface using Caret software.

(b) fMRI signal changes for local novelty (blue cross on SPM maps): auditory cortex, striatum. Plots show signal change for habituation (hab), frequent (freq) and rare stimuli. Each area is shown in coronal T1-weighted images from the macaque MNI atlas. y, level of coronal section relative to the bregma in the Paxinos atlas. ( $p < 0.001$ , uncorrected).

(c) Activation maps (global contrast: rare minus frequent sounds). Activations are displayed on the cortical surface using Caret software.

(d) fMRI signal changes for global novelty (blue cross on SPM maps): 8A/45, 6V (F5), auditory cortex. Plots show signal change for habituation (hab), frequent (freq) and rare stimuli. Each area is shown in coronal T1-weighted images from the macaque MNI atlas. y, level of coronal section relative to the bregma in the Paxinos atlas. ( $p < 0.001$ , uncorrected).

## Monkey R

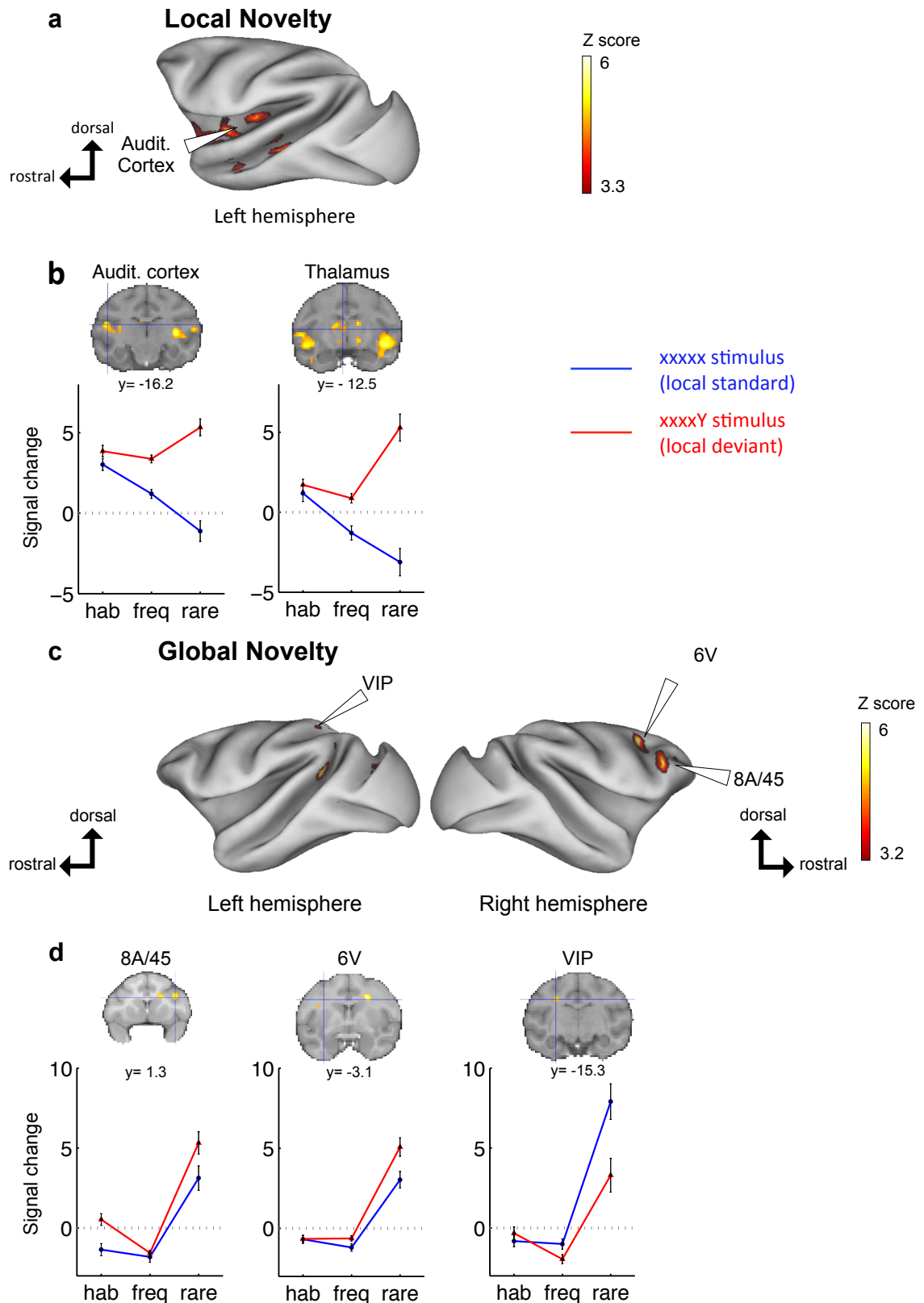


### fMRI activations for auditory stimuli

(a) T-score maps for all sounds overlying coronal T1-weighted images from the macaque MNI atlas. ( $p < 0.05$ , corrected by FDR). y, level of coronal section relative to the bregma in the Paxinos atlas: auditory cortex

(b) T-score maps for rare sounds overlying coronal T1-weighted images from the macaque MNI atlas. ( $p < 0.05$ , corrected by FDR). y, level of coronal section relative to the bregma in the Paxinos atlas: 6V (F5), VIP

## Monkey R



### fMRI activations for local and global novelties

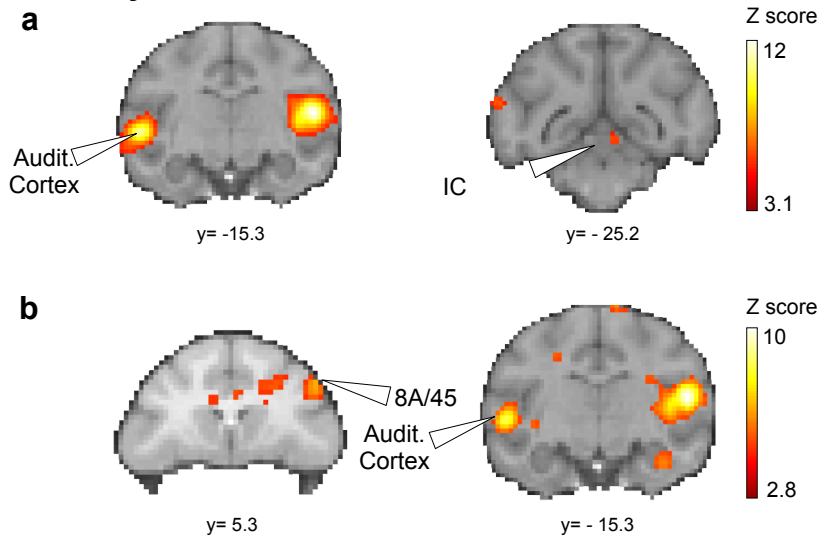
(a) Activation maps (local contrast: local deviant minus local standard). Activations are displayed on the cortical surface using Caret software.

(b) fMRI signal changes for local novelty (blue cross on SPM maps): auditory cortex, thalamus. Plots show signal change for habituation (hab), frequent (freq) and rare stimuli. Each area is shown in coronal T1-weighted images from the macaque MNI atlas. y, level of coronal section relative to the bregma in the Paxinos atlas. ( $p < 0.001$ , uncorrected).

(c) Activation maps (global contrast: rare minus frequent sounds). Activations are displayed on the cortical surface using Caret software

(d) fMRI signal changes for global novelty (blue cross on SPM maps): 8A/45, 6V (F5), VIP. Plots show signal change for habituation (hab), frequent (freq) and rare stimuli. Each area is shown in coronal T1-weighted images from the macaque MNI atlas. y, level of coronal section relative to the bregma in the Paxinos atlas. ( $p < 0.001$ , uncorrected).

## Monkey J

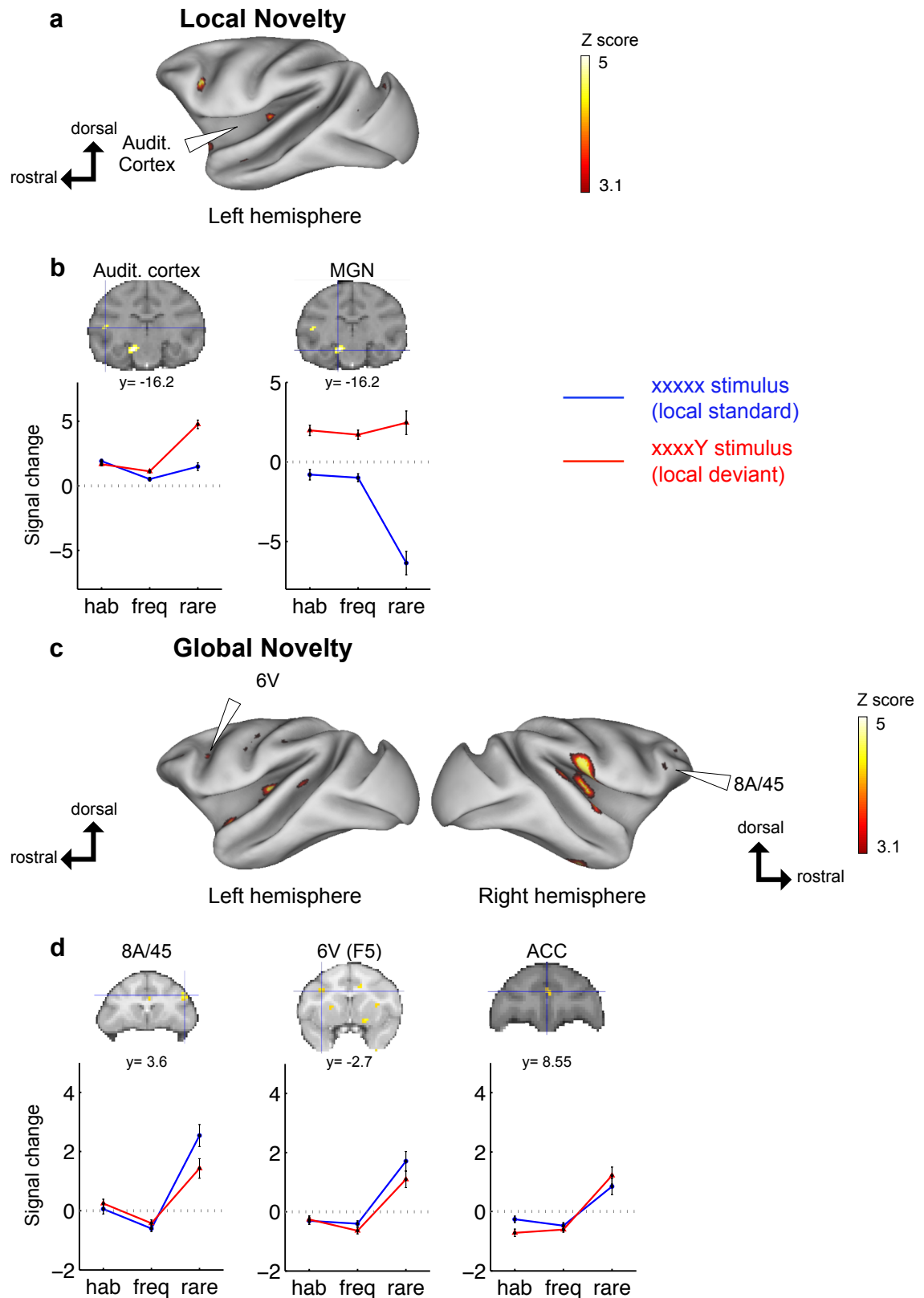


### fMRI activations for auditory stimuli

(a) T-score maps for all sounds overlying coronal T1-weighted images from the macaque MNI atlas. ( $p < 0.05$ , corrected by FDR). y, level of coronal section relative to the bregma in the Paxinos atlas: auditory cortex, inferior colliculus (IC)

(b) T-score maps for rare sounds overlying coronal T1-weighted images from the macaque MNI atlas. ( $p < 0.05$ , corrected by FDR). y, level of coronal section relative to the bregma in the Paxinos atlas: 8A/45, auditory cortex

## Monkey J



### fMRI activations for local and global novelties

(a) Activation maps (local contrast: local deviant minus local standard). Activations are displayed on the cortical surface using Caret software.

(b) fMRI signal changes for local novelty (blue cross on SPM maps): auditory cortex, medial geniculate nucleus (MGN). Plots show signal change for habituation (hab), frequent (freq) and rare stimuli. Each area is shown in coronal T1-weighted images from the macaque MNI atlas. y, level of coronal section relative to the bregma in the Paxinos atlas. ( $p < 0.001$ , uncorrected).

(c) Activation maps (global contrast: rare minus frequent sounds). Activations are displayed on the cortical surface using Caret software.

(d) fMRI signal changes for global novelty (blue cross on SPM maps): 8A/45, 6V (F5), VIP, ACC. Plots show signal change for habituation (hab), frequent (freq) and rare stimuli. Each area is shown in coronal T1-weighted images from the macaque MNI atlas. y, level of coronal section relative to the bregma in the Paxinos atlas. ( $p < 0.001$ , uncorrected).