

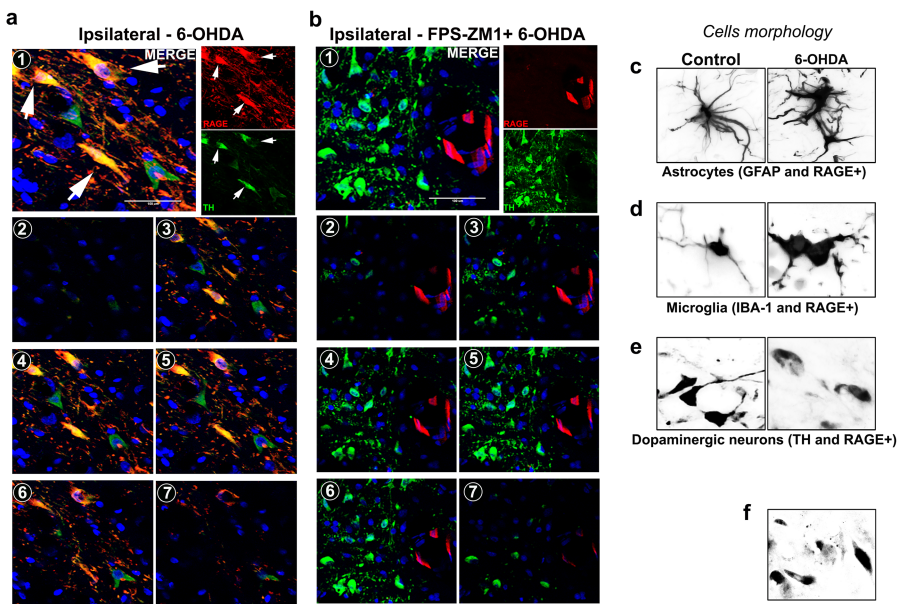
## **Targeted inhibition of RAGE in *substantia nigra* of rats blocks 6-OHDA–induced dopaminergic denervation**

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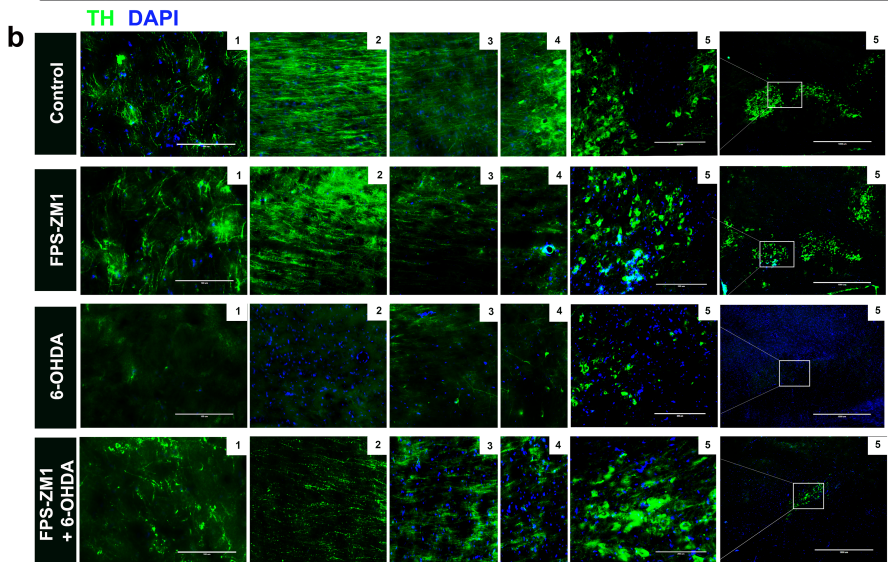
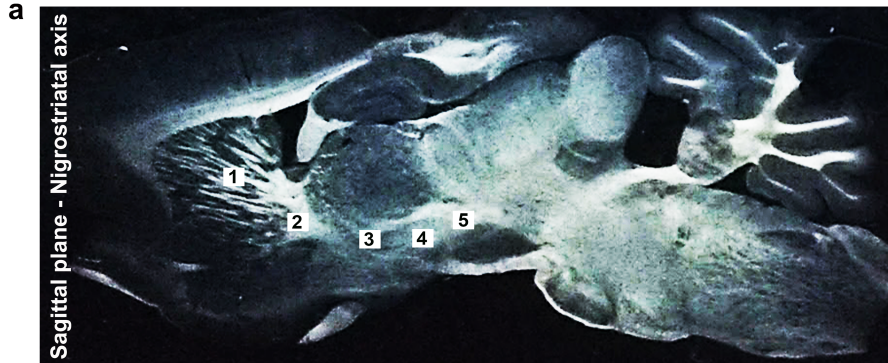
**Supplementary figure S1. RAGE is localized to TH(+) neurons.**

SN were prepared for immunofluorescence 15 days after the administration of 6-OHDA.

**a)** Confocal representative immunofluorescence images of SN co-immunostained for TH, RAGE and DAPI to ipsilateral 6-OHDA-induced and **b)** ipsilateral FPS-ZM1+6-OHDA (n=10 per group): Only ipsilateral sides are showed.

The confocal microscopy images were taken with 100 um of magnification and the z-axis layers (1-7) are detailed. Detailed cell morphology focused in one cell and shown in black and white:

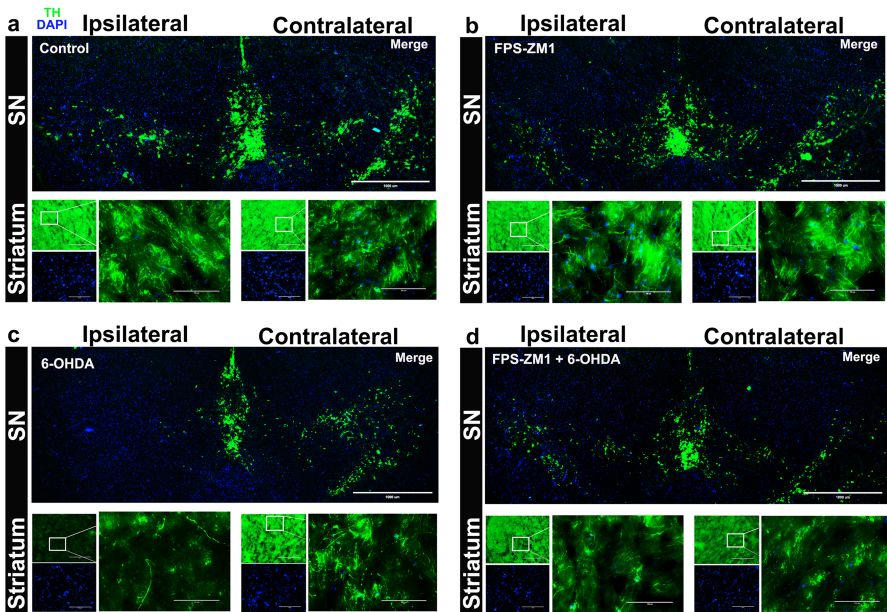
**c)** Astrocytes. **d)** Microglia. **e)** Dopaminergic neurons. **f)** Cells immunostained only with RAGE.



**Supplementary figure S2. FPS-ZM1 blocked denervation 6-OHDA-induced in nigrostriatal axis**

Rats were prepared for immunofluorescence 15 days after the injection of 6-OHDA.

**a)** Picture of rat brain, the numbers (1-5) represents the location of the image microscopy (100 or 400 um of magnification). **b)** The extent of damage to the nigrostriatal axis immunostained for TH and DAPI. The ipsilateral sides are shown ( $n=3$  per group).



**Supplementary figure S3. FPS-ZM1 blocked denervation 6-OHDA-induced in SN and striatum**

SN and striatum were prepared for immunofluorescence 15 days after the injection of 6-OHDA.

**a)** control, **b)** FPS-ZM1, **c)** 6-OHDA and **d)** FPS-ZM1+6-OHDA representative immunofluorescence images of SN and striatum co-immunostained for TH and DAPI (n=10 per group). The ipsilateral and contralateral sides are shown. The microscopies magnification is detail in each image.