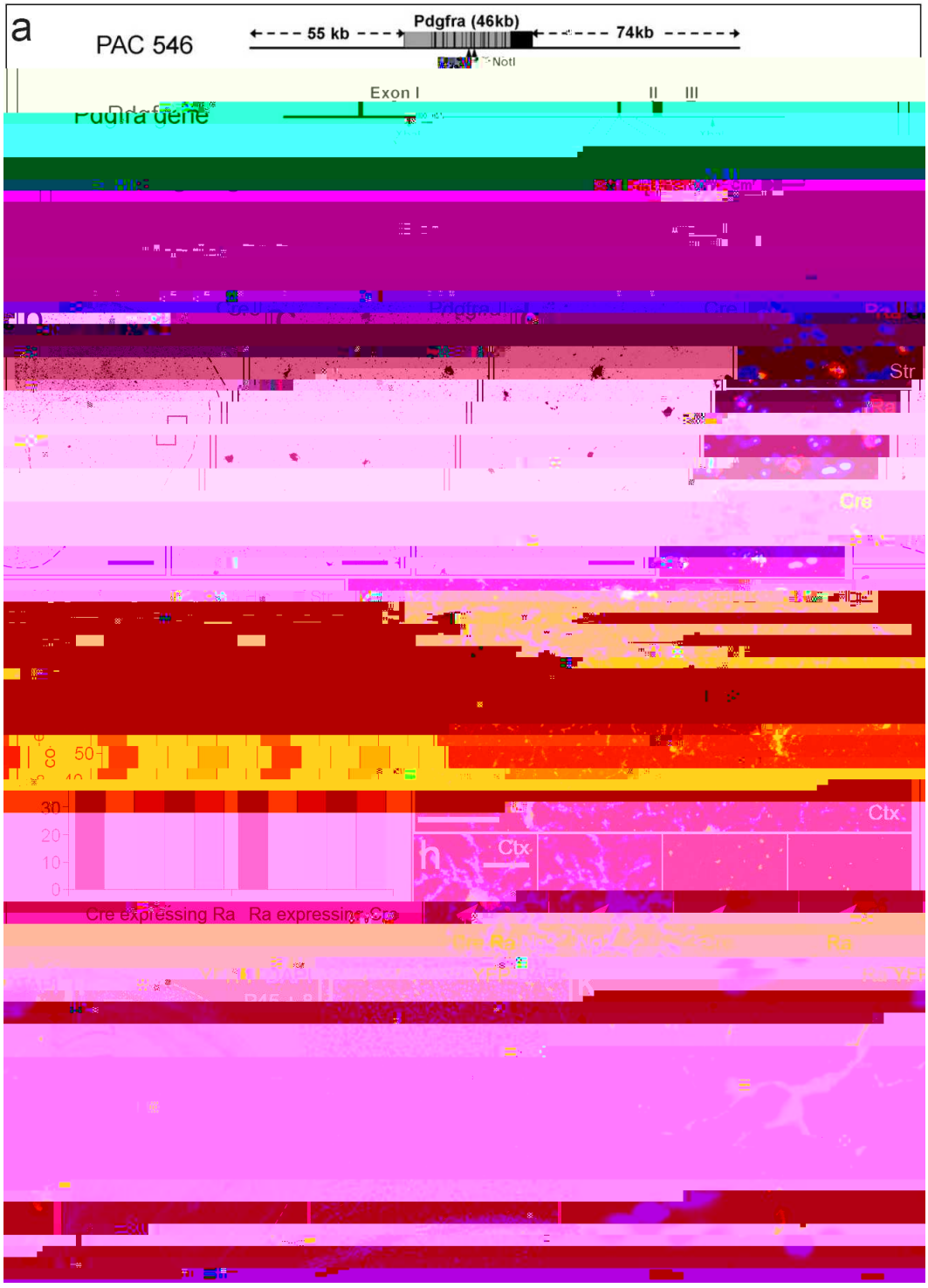
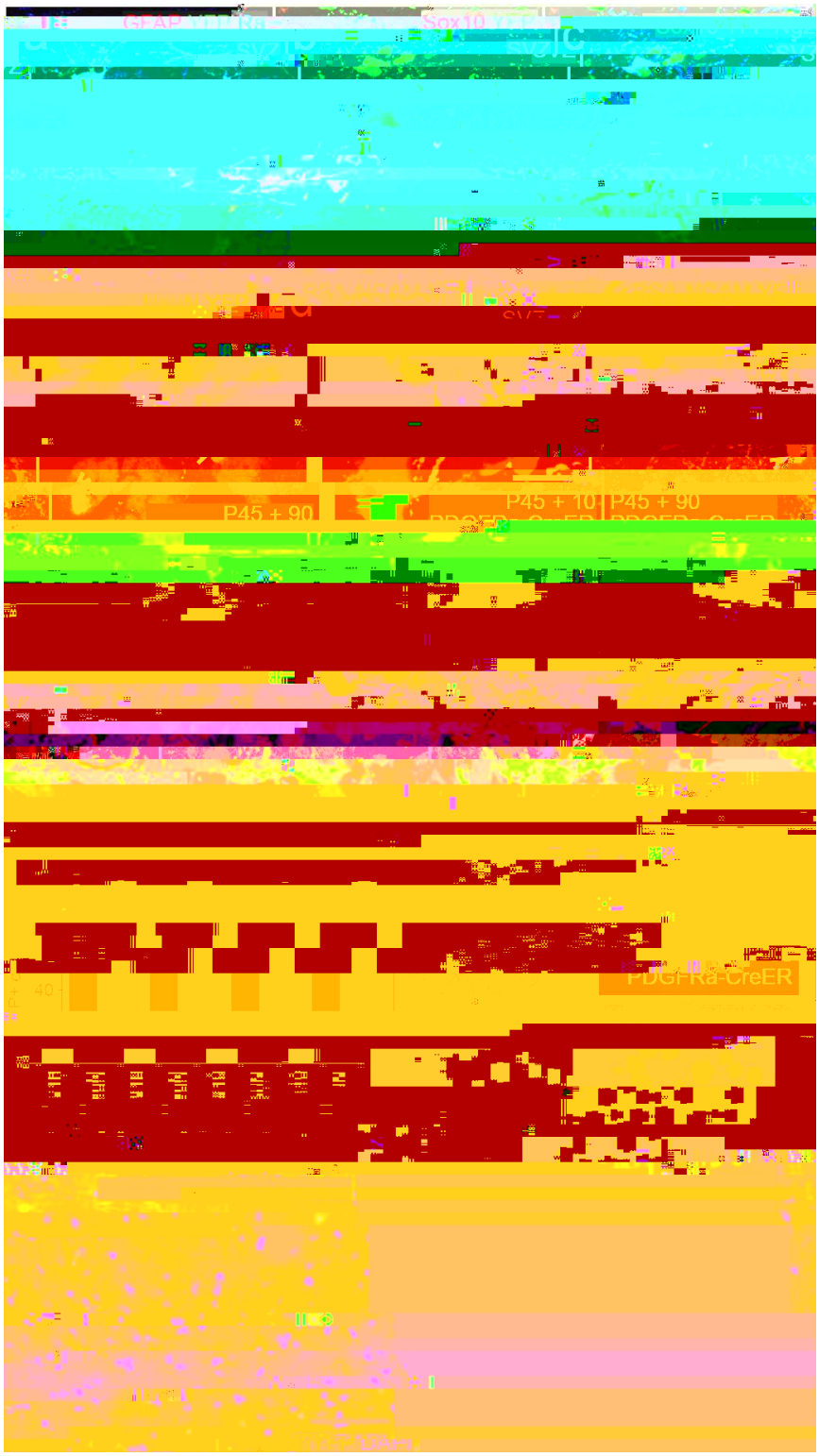

a
PAC 546
55 kb
Pdgfra (46kb)
74kb
NotI
Exon I
II
III
Str
Cre
Ctx
h
Ctx
Cre expressing Ra
Ra expressing Cre
Cre Ra
Ra

clone (546-M3), which contained a genomic fragment ~175 kb in length, was selected for modification and transgenic mouse production.

The targeting vector used to modify PAC 546-M3 is illustrated (**a**). The construct was designed to insert the tamoxifen-inducible form of Cre recombinase (CreER^{T2}) (Indra et al., 1999) into the first coding exon of the *Pdgfra* gene (exon 2). Homology regions 0.5 kb in length were amplified by PCR from the genomic PAC using Expand High Fidelity *Taq*I DNA Polymerase (Roche). The coding sequence of CreER^{T2} was fused to the initiation codon of *Pdgfra* via a *Bsa*I restriction site by a PCR-based approach. A chloramphenicol resistance (*Cm^{R}*) cassette flanked by *frt* sites was inserted between *CreER^{T2}* and the 3′ homology sequence to allow selection of correctly recombined clones. PAC recombination and removal of the *Cm^{R}* cassette was carried out in a bacterial system as p(f)-0.9981TMng hloralm0(on)-i0lonesalutV Tm

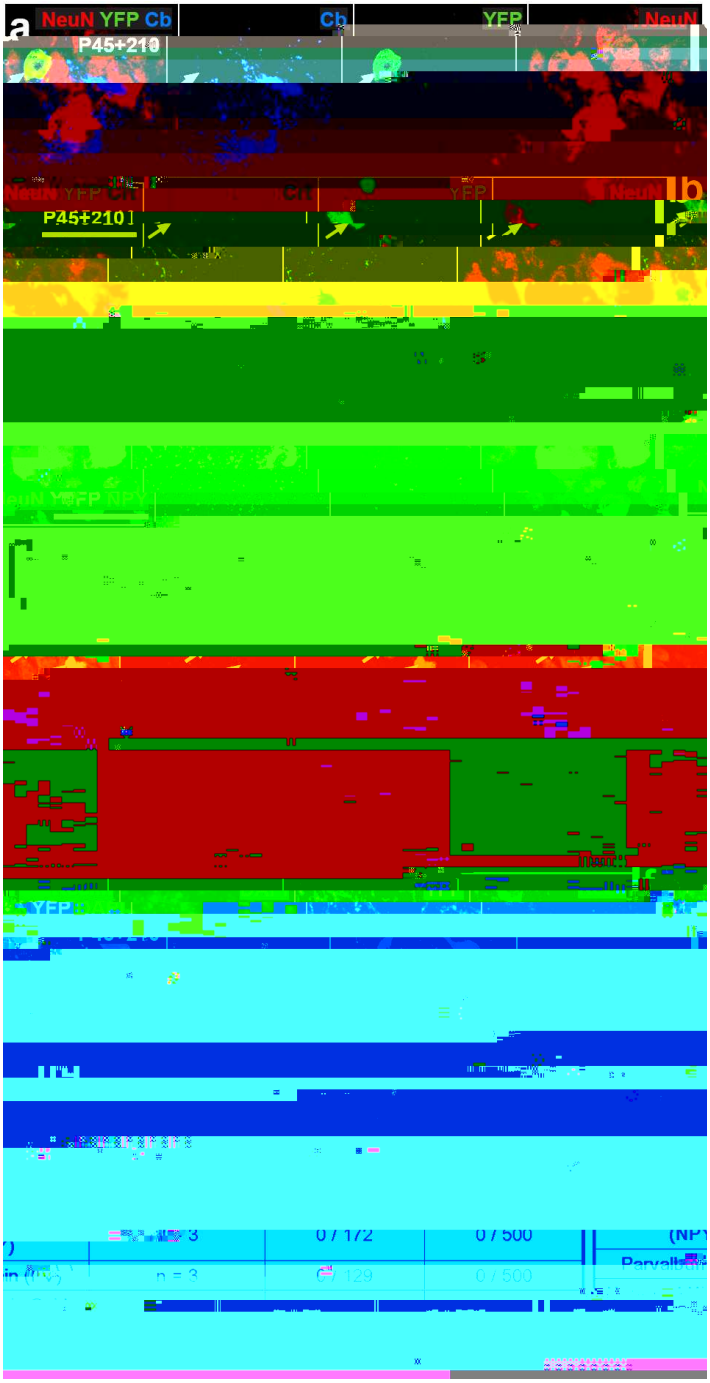


Supplementary Figure 3. Pdgfra-CreER^{T2} is not active in SVZ stem cells: comparison of Pdgfra-CreER^{T2} and Fgfr3-iCreER^{T2} transgenic mice.

(**a**) Sections of tamoxifen-induced *Pdgfra-CreER^{T2}* / *Rosa26-YFP* forebrain (P45+10) were immunolabelled for YFP, GFAP and PDGFRA. No (YFP+, GFAP+) type-B stem cells were observed

ventricle). **Arrowhead** in (**a**) indicates a (YFP+, PDGFRA+) cell (green/blue) that is GFAP-negative - presumably an OLP that was either formed within the SVZ or migrated in from outside. The YFP+, PDGFRA-negative (green) cells in (**a**) are presumably recently differentiated from (YFP+, PDGFRA+) cells because all YFP+ cells in the SVZ were SOX10+ (**b**, **c**). (**d**) YFP+ cells in the SVZ did not co-label for PSA-NCAM, a marker of migratory neuroblasts (type-A cells). (**e**, **f**) At P45+90, long enough post-tamoxifen for migratory neuroblasts to have traversed the rostral migratory stream to the olfactory bulb, there were no YFP+, PSA-NCAM+ neuroblasts (**e**) or YFP+, NeuN+ interneurons (**f**) in the olfactory bulb. (**g**) Sections of tamoxifen-induced *Fgfr3-iCreER*^{T2} / *Rosa26-YFP* forebrain (P45+10) were immunolabelled for YFP and GFAP. All GFAP+ cells within the SVZ were YFP-labelled (small arrows in **g**; single confocal scan), including all (YFP+, GFAP+) type-B stem cells. At P45+10 there were no

1]z23 6991.,2(1649-9747(og7(x9bdau(en,M04(en.,l)32.93b637(Kx-c)es)(en-1s)SF)aa0



Supplementary Figure 4. Adult-born piriform neurons do not express interneuron markers.

Images in **a**-**d** show layer 2 of the piriform cortex immunolabelled for YFP, NeuN and one of the interneuron markers (**arrowheads**) Calbindin (Cb), Calretinin (Crt), Neuropeptide-Y (NPY) or Parvalbumin (Pv). (YFP+, NeuN+) neurons are indicated by **arrows**. No immunolabelled interneurons were YFP+. Two other interneuron markers, Tyrosine Hydroxylase and Somatostatin were also tested but no immuno-positive interneurons were detected, either YFP-positive or –negative, in this part of the piriform cortex. YFP+ neurons (NeuN+ or Sox10-) did not label for Nitric Oxide Synthase (nNOS) (**e**) or Reelin (**f**). Numbers of cells scored are tabulated in **g**. *Scale bars:* 35 μm (**a**, **b**, **c**, **f)**, 60 μm (**d**), 80 μm (**e**).