
Supplementary information

**Mechanism of cytarabine-induced
neurotoxicity**

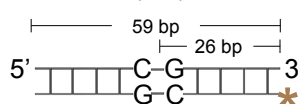
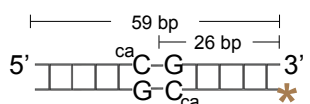
In the format provided by the
authors and unedited

SI Fig. 1

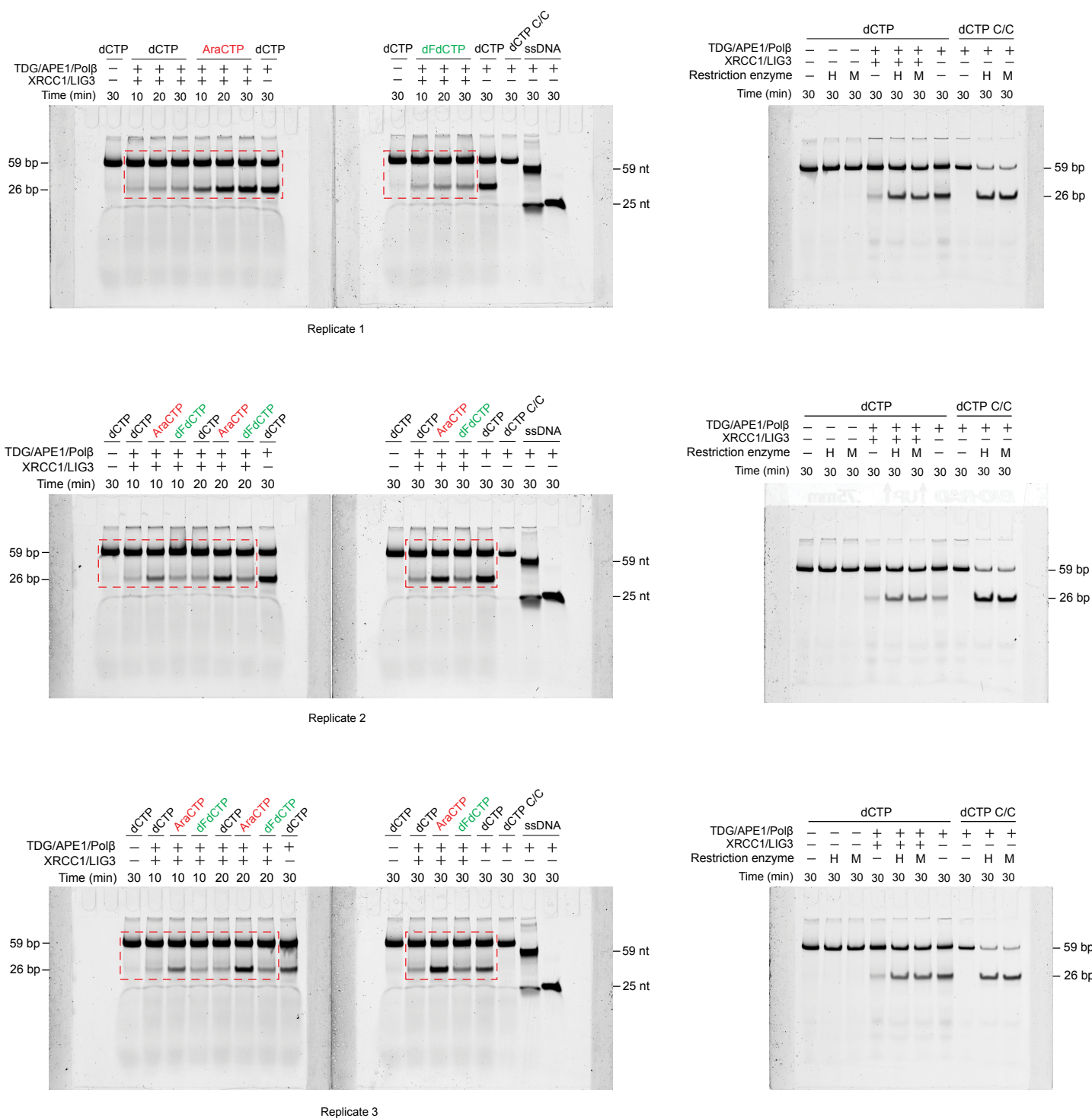
a

DNA substrate containing caC/caC

DNA substrate containing C/C
(C/C)

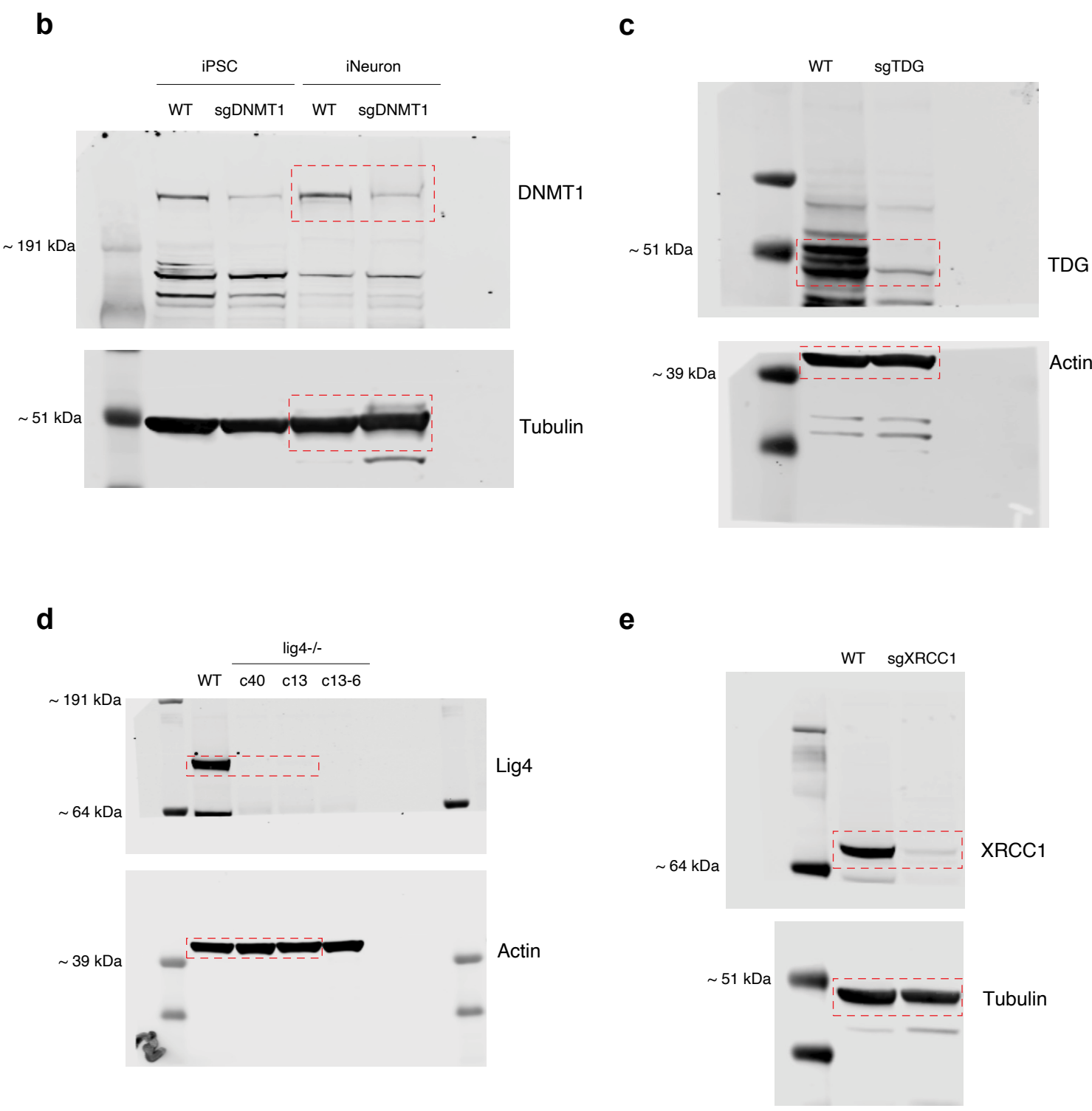


Unless indicated, all the DNA sustrate used here was the one containing caC/caC



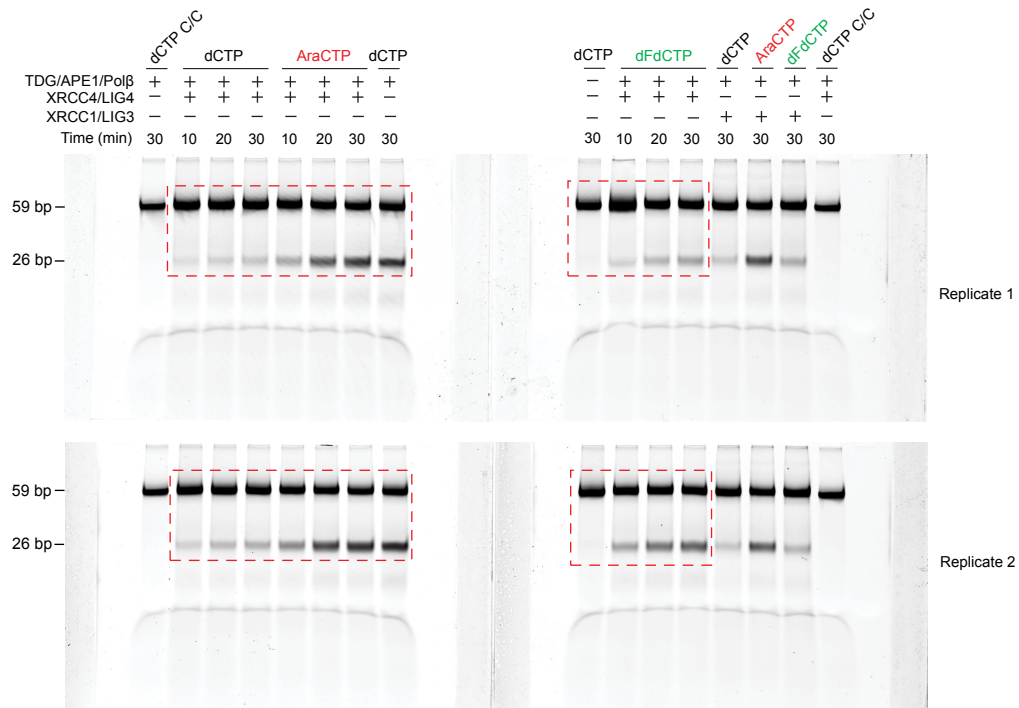
SI Fig. 1 | Uncropped gels. The region highlighted by the red dashed rectangle is shown in the Main and Extended Figures with contrast adjustments. **a**, Uncropped native PAGE gels for Fig. 5k and Extended Data Fig. 7j. The right panels displaying the HpaII and MspI cleaved products, were used for the quantification of aborted base-excision repair (BER) in Fig. 5l in the main text.

SI Fig. 1

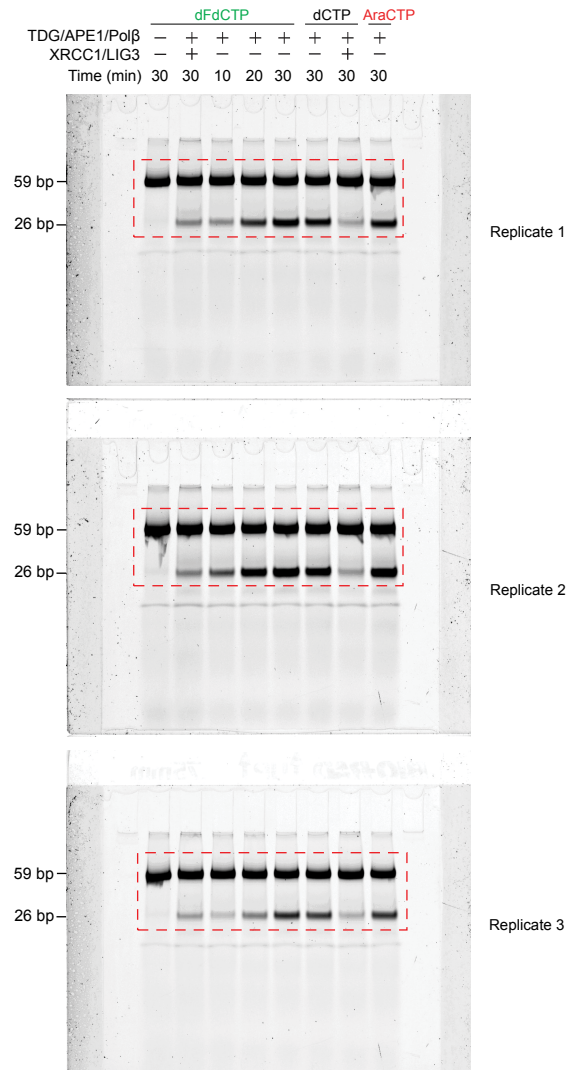


SI Fig. 1 | Uncropped gels. The region highlighted by the red dashed rectangle is shown in the Main and Extended Figures with contrast adjustments. **b,c**, Western blots for Extended Data Fig. 1f to measure the knockdown efficiency of DNMT1 and TDG in iNeurons. **d**, Western blots for Extended Data Fig. 4g to validate the knockout of LIG4 in iNeurons. **e**, Western blots for Extended Data Fig. 7n to measure the knockdown efficiency of XRCC1 in iPSCs.

f



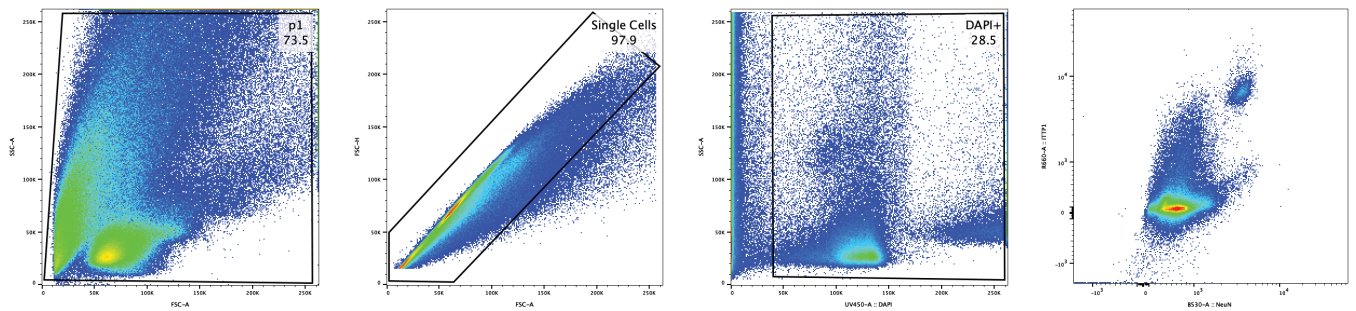
g



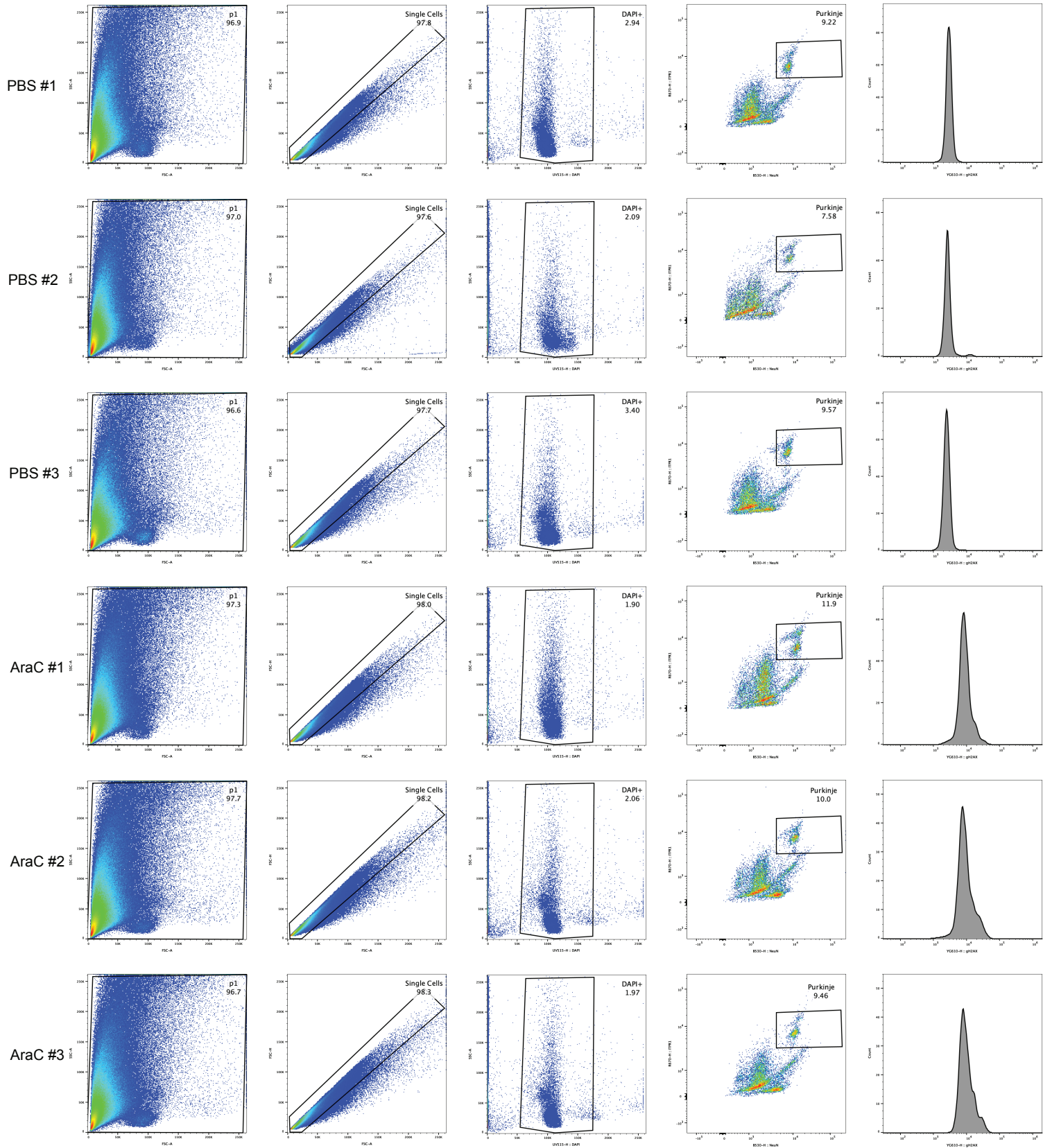
SI Fig. 1 | Uncropped gels. The region highlighted by the red dashed rectangle is shown in the Main and Extended Figures with contrast adjustments. **f**, Uncropped native PAGE gels for Extended Data Fig. 7k. **g**, Uncropped native PAGE gels for Extended Data Fig. 7l.

SI Fig. 2

a

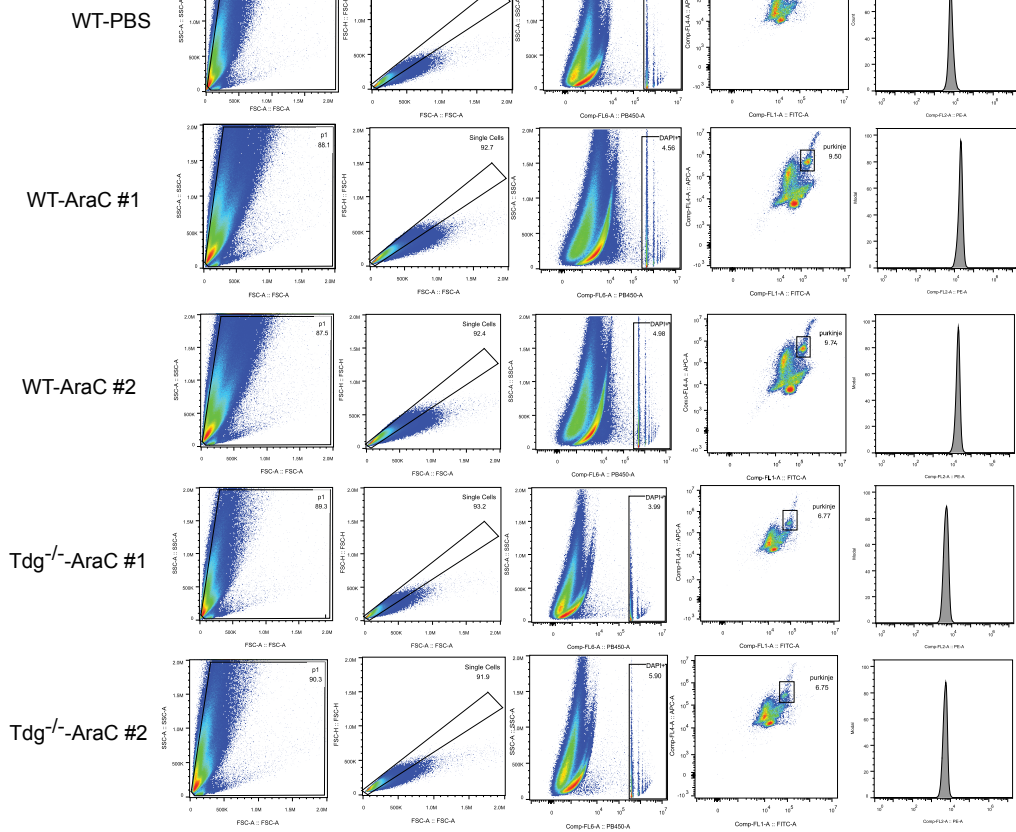


b

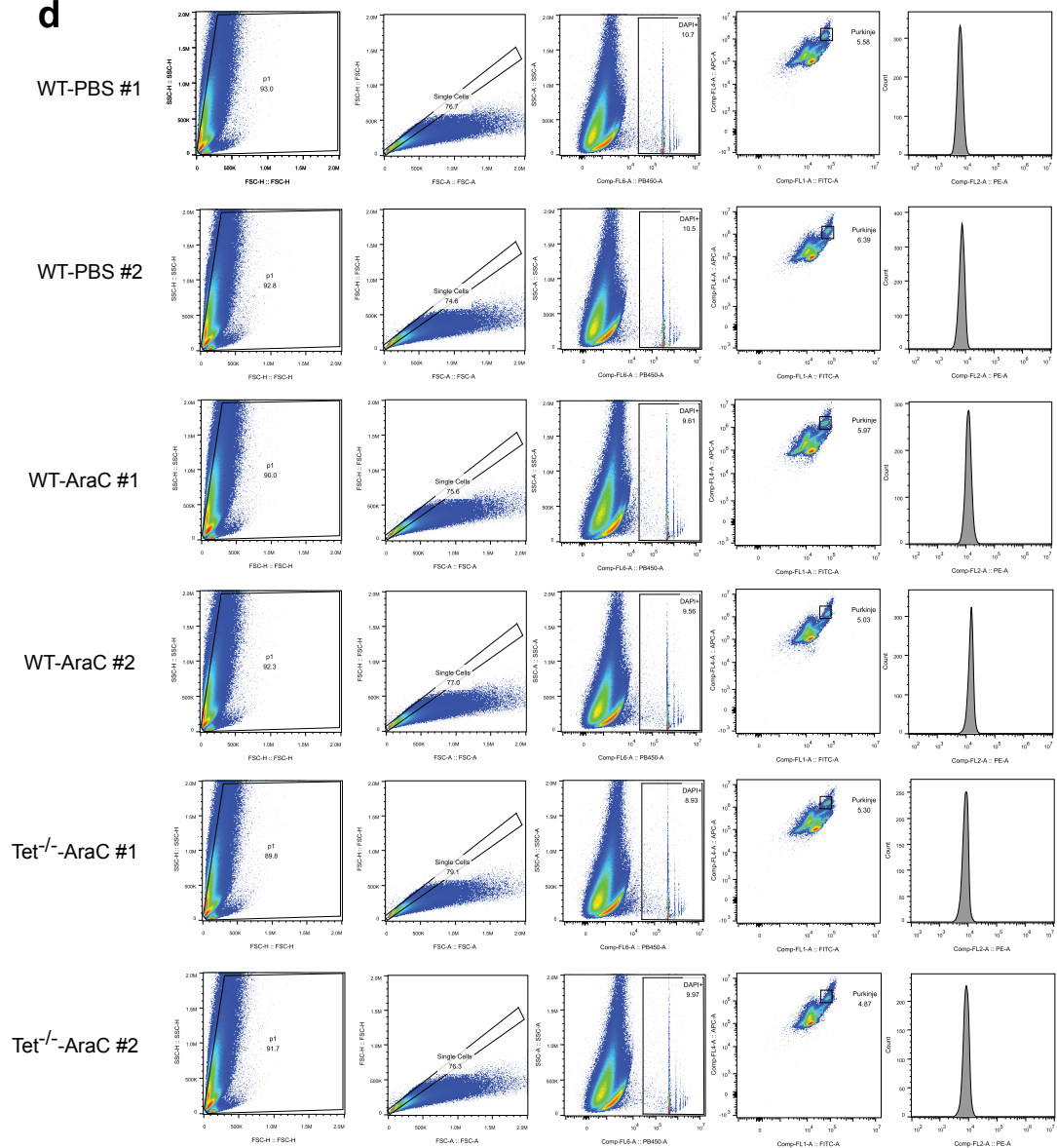


SI Fig. 2 | Flow cytometry gating strategy. a, Flow cytometry gating strategy for Fig. 4b in the main text. **b**, Flow cytometry gating strategy for Fig. 4c in the main text.

c

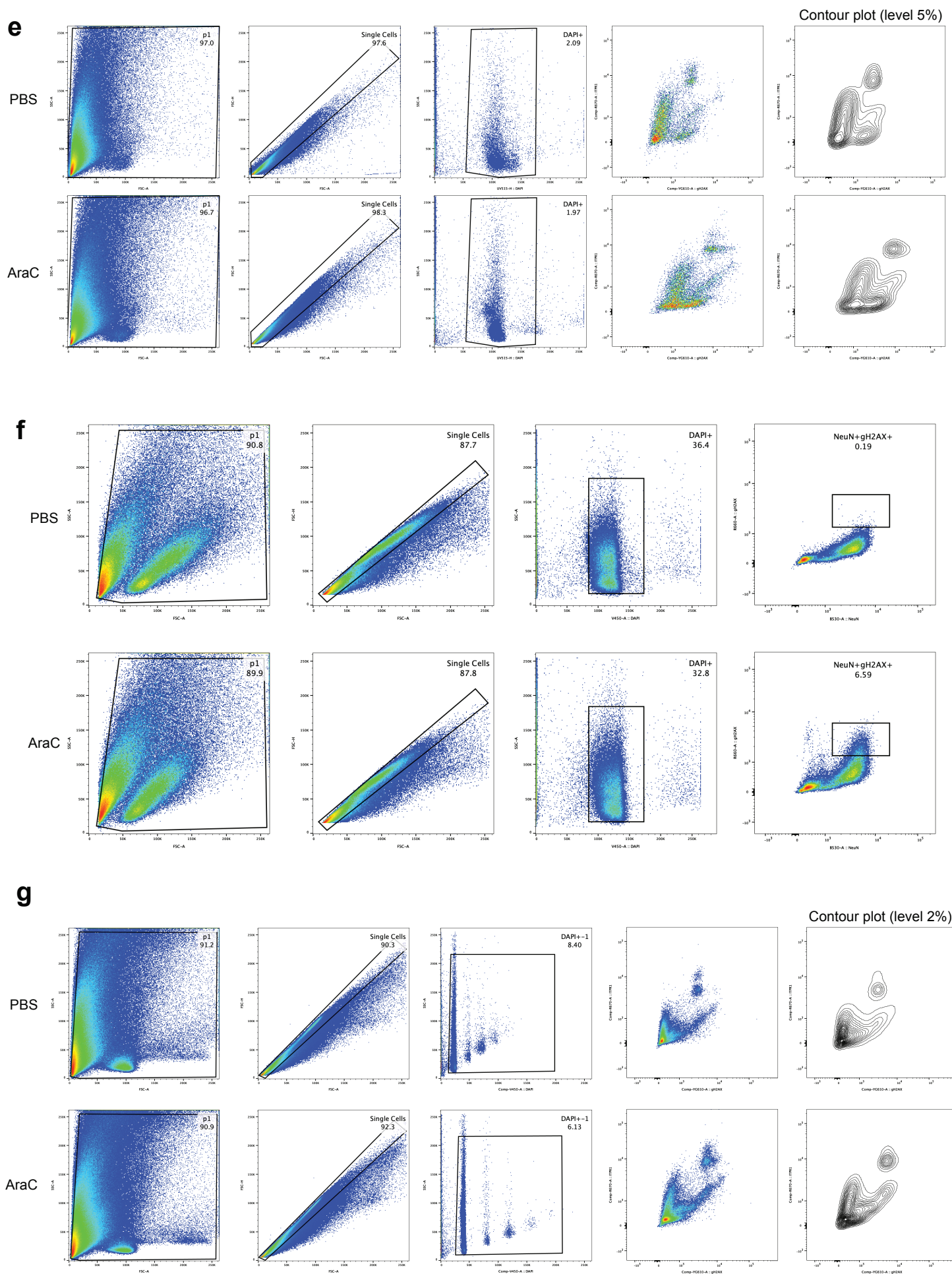


d



SI Fig. 2 | Flow cytometry gating strategy. c, Flow cytometry gating strategy for Fig. 5f in the main text. d, Flow cytometry gating strategy for Fig. 5g in the main text. PB450: DAPI; FITC: NeuN; APC: ITPR1; PE: gamma H2AX.

SI Fig. 2

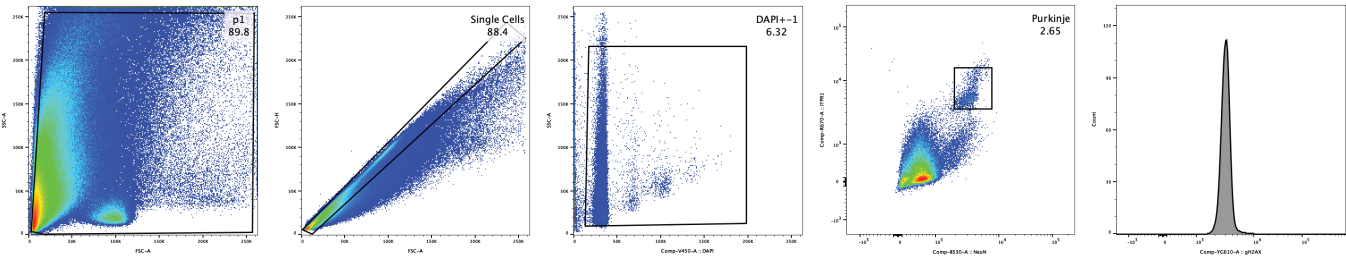


SI Fig. 2 | Flow cytometry gating strategy. e, Flow cytometry gating strategy for Extended Data Fig. 5a (Examples demonstrating the flow cytometry profile shown in Fig. 4c). **f**, Flow cytometry gating strategy for Extended Data Fig. 5f. **g**, Flow cytometry gating strategy for Extended Data Fig. 6c (Examples demonstrating the flow cytometry profile shown in Extended Data Fig. 6d).

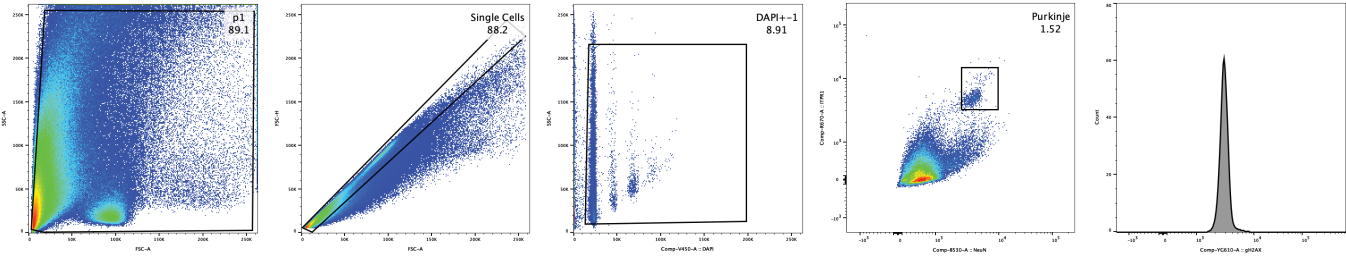
SI Fig. 2

h

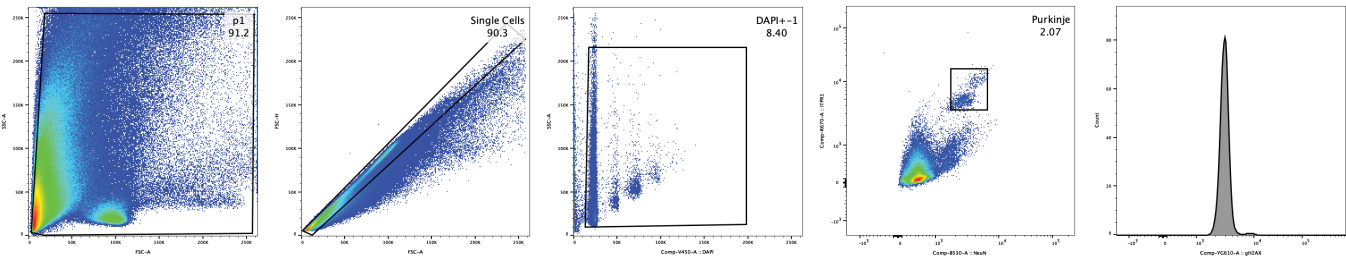
PBS #1



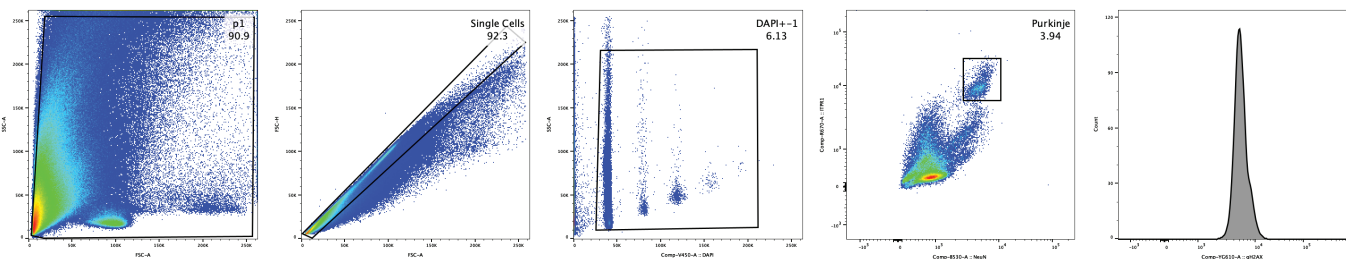
PBS #2



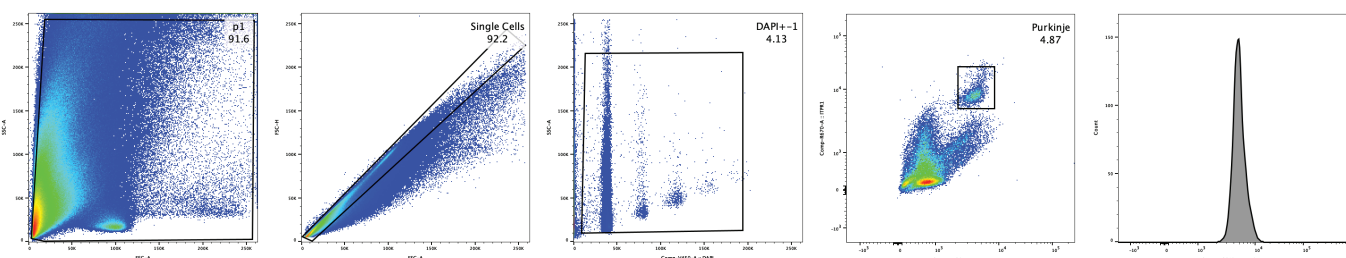
PBS #3



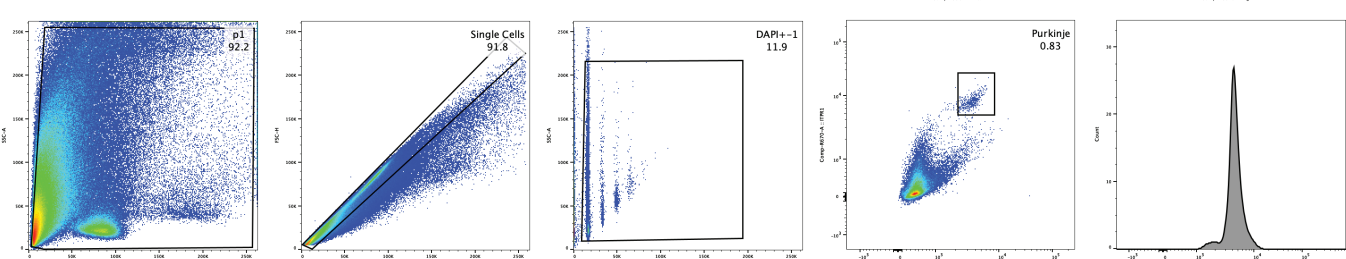
AraC #1



AraC #2



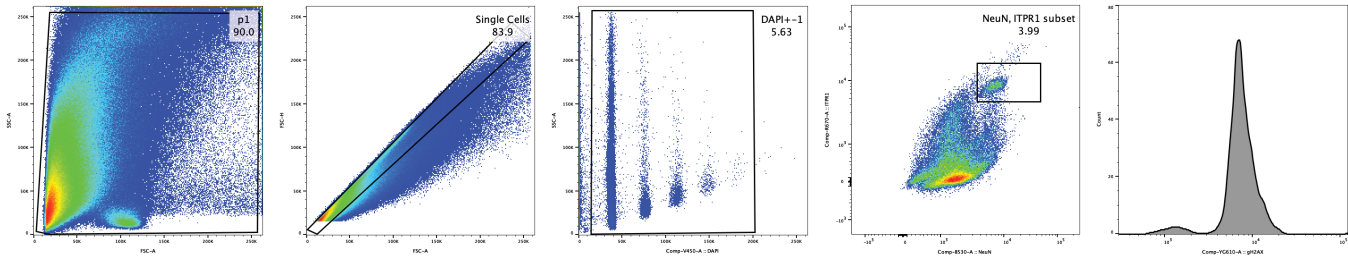
AraC #3



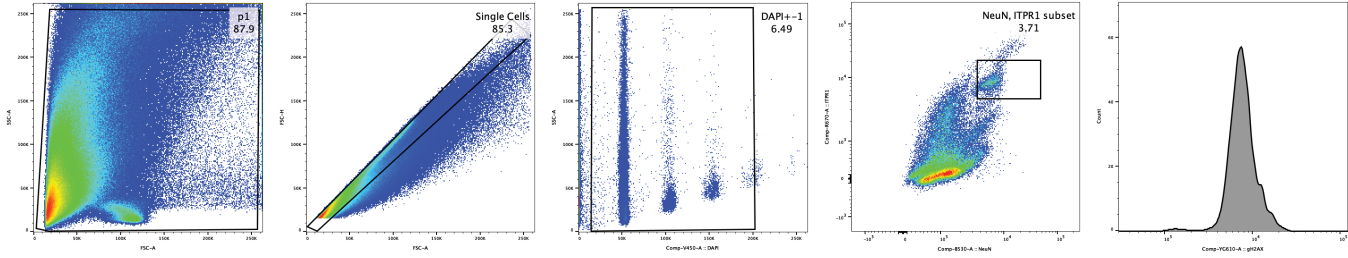
SI Fig. 2 | Flow cytometry gating strategy. h, Flow cytometry gating strategy for Extended Data Fig. 6d.

i

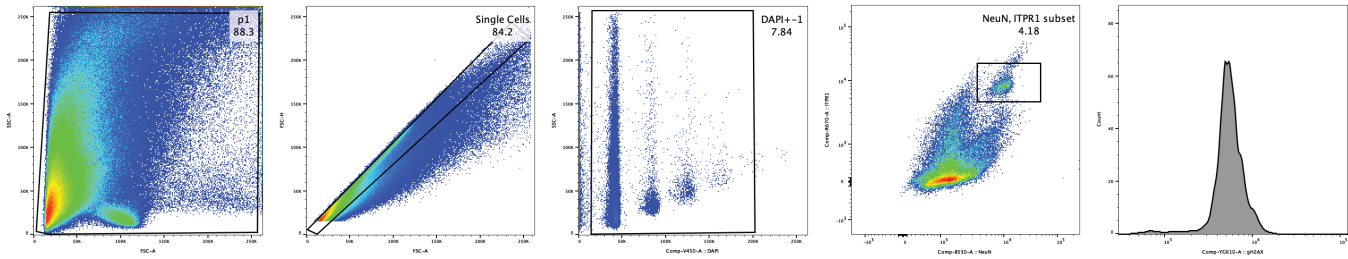
WT-AraC #1



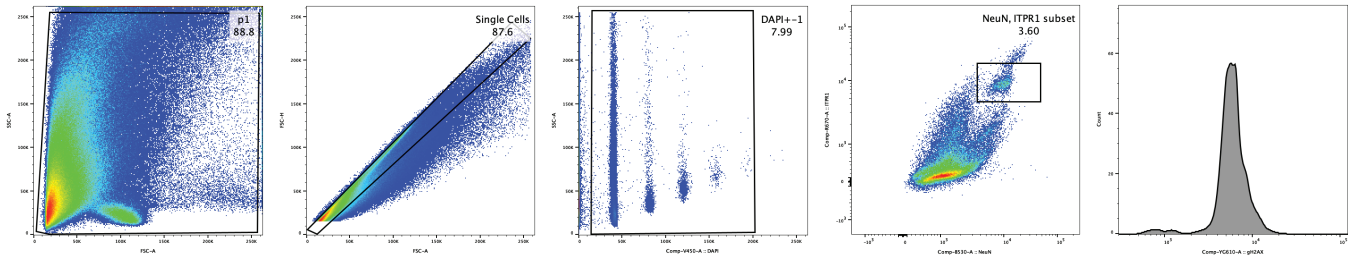
WT-AraC #2



Tet^{-/-}-AraC #1



Tet^{-/-}-AraC #2



SI Fig. 2 | Flow cytometry gating strategy. i, Flow cytometry gating strategy for Extended Data Fig. 6e.