Disrupted astrocyte-neuron glutamine-glutamate cycling in the medial prefrontal cortex contributes to depressive-like behaviors

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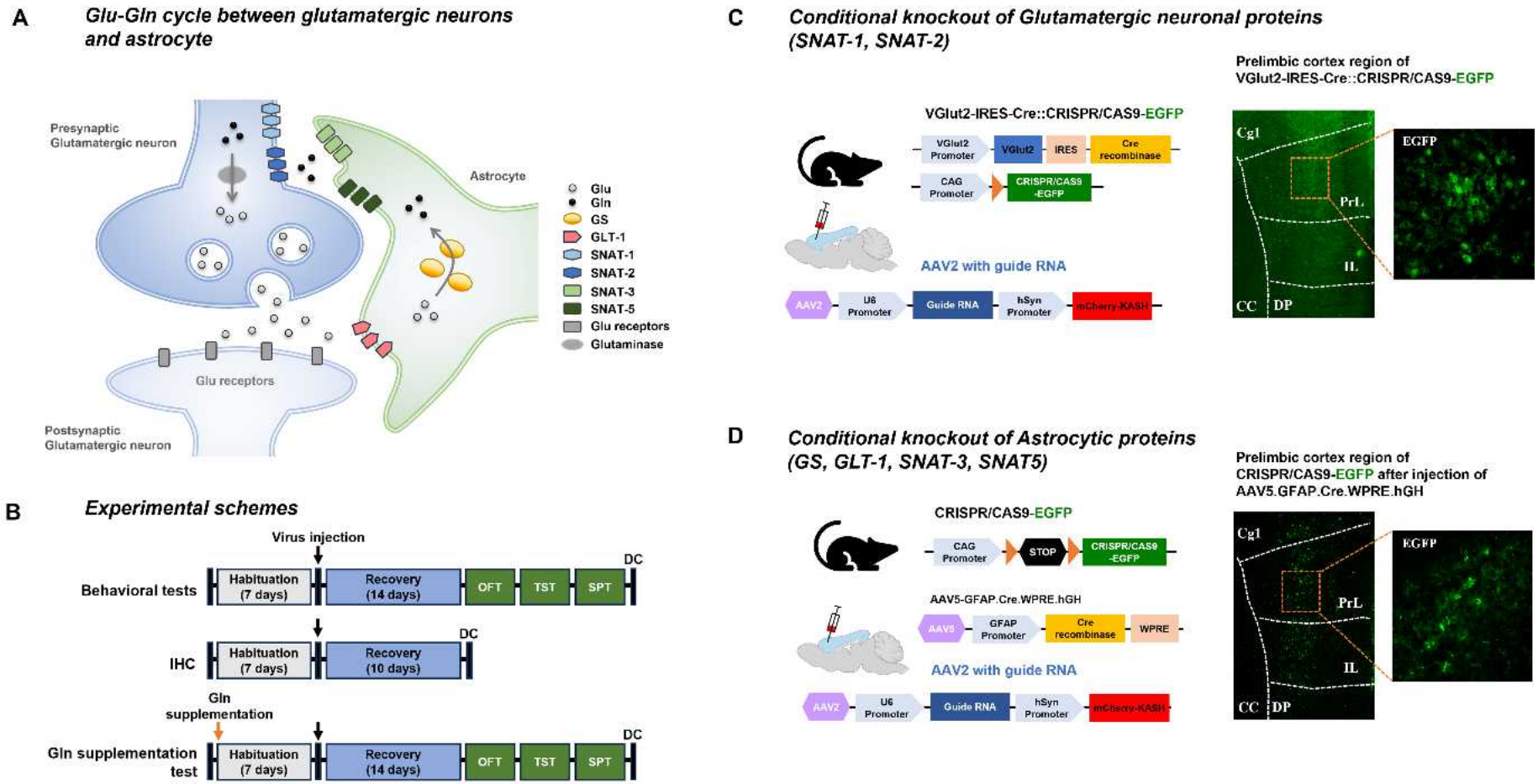
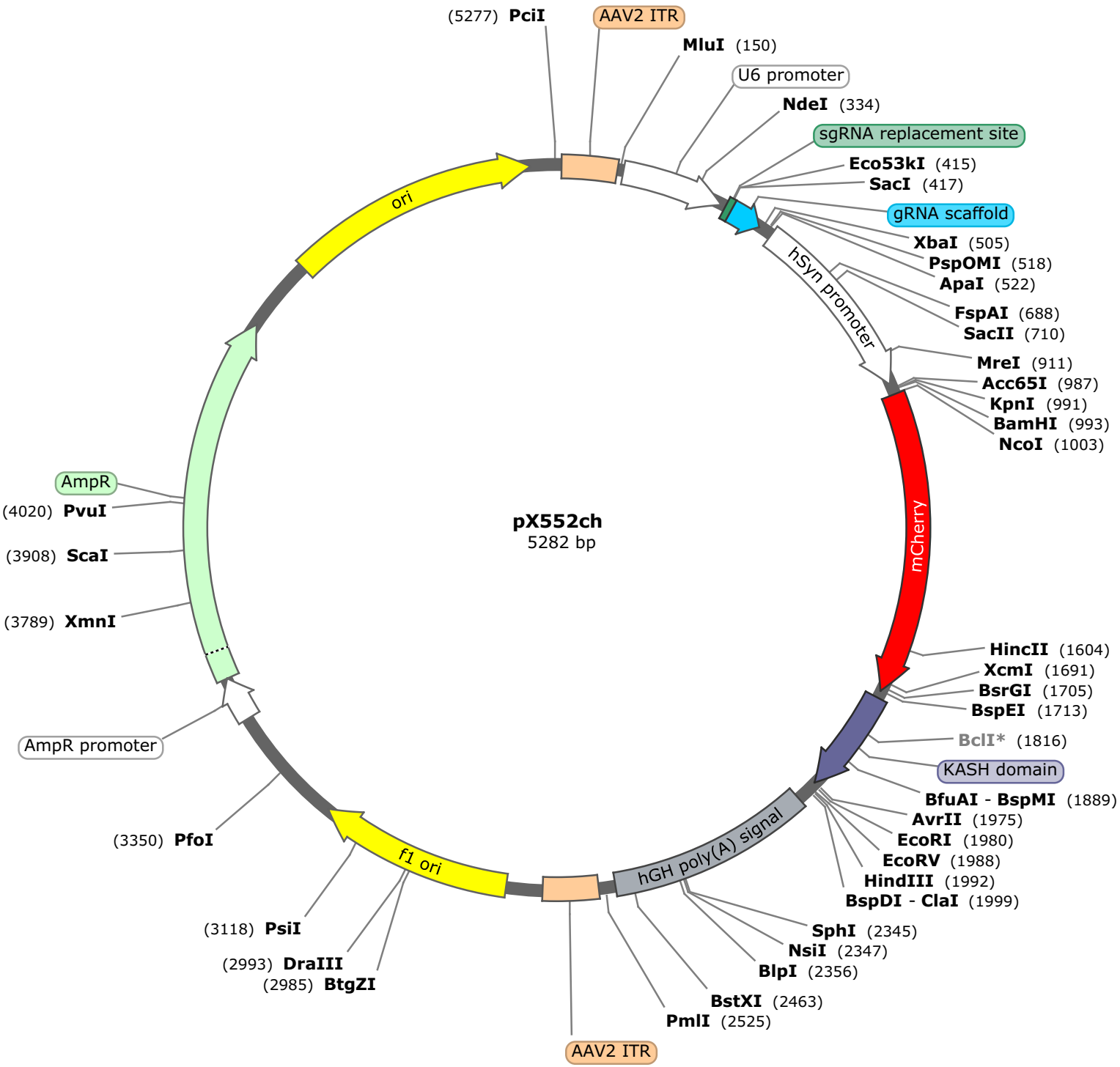


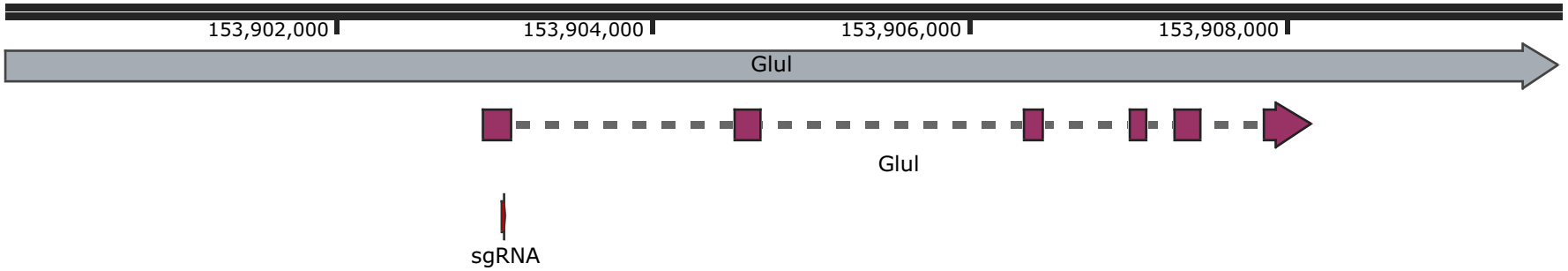
Fig. S1. Overall information of experiments in the present study. (A) Schematic drawing of target components investigated in this study and their positions in the Glu-Gln cycle between glutamatergic neurons and astrocyte, (B) experimental timeline of each experiment, (C) Schematic diagrams of Vglut2-IRES-Cre::CRISPR/CAS9-EGFP and AAV2 with small guide RNA, and the representative EFGP signals of the prelimbic cortex after infection. (D) Schematic diagrams of CRISPR/CAS9-EGFP, AAV5-GFAP.Cre.WPRE.hGH, AAV2 with small guide RNA, and the representative EGFP signals of the prelimbic cortex after infection.

Table S1. Sequences of each small guide RNA used in this study

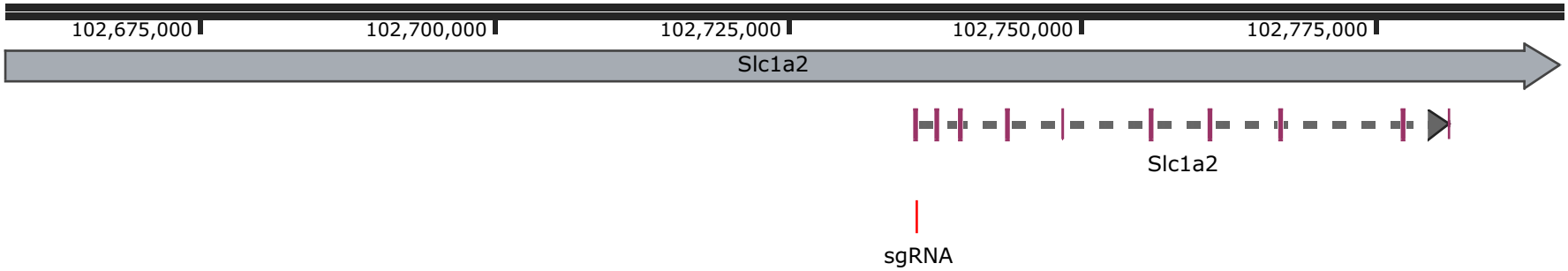
Gene	**SgRNA (5¢-3¢)**	**Orientation**
GluI	gcgctgcaagacccgtaccc	forward
Slc1a2	tgtcgcacatgcgcatgccc	reverse
Slc38a1	tctgcagctccgttagctcg	reverse
Slc38a2	actgctgctgtcctcatccg	reverse
Slc38a3	tccaccatctctgtctgtcg	reverse
Slc38a5	atggccatttcatgcgctgt	forward

Fig. S2. Information of vector map used in this study (see the next page)

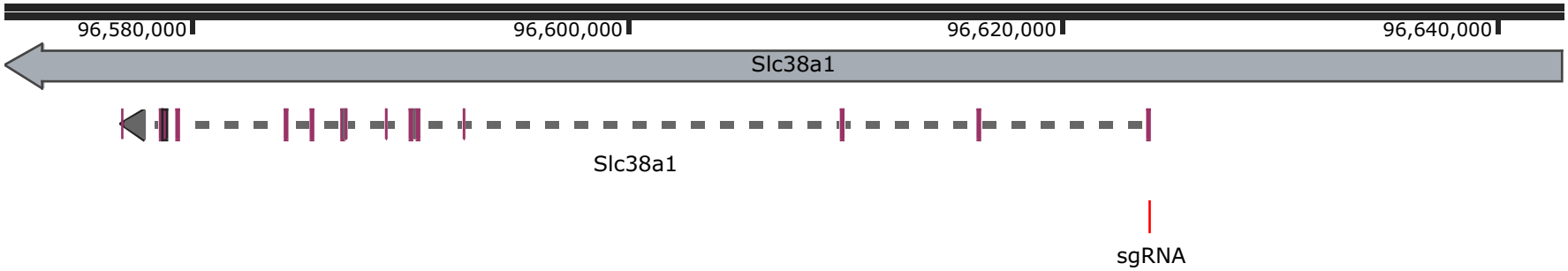




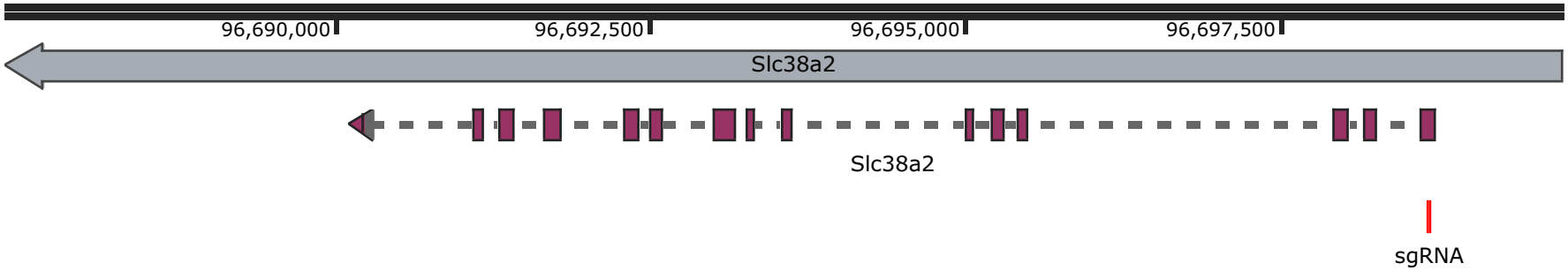
Glul
9795 bp



Slc1a2
132,191 bp



Slc38a1
71,496 bp



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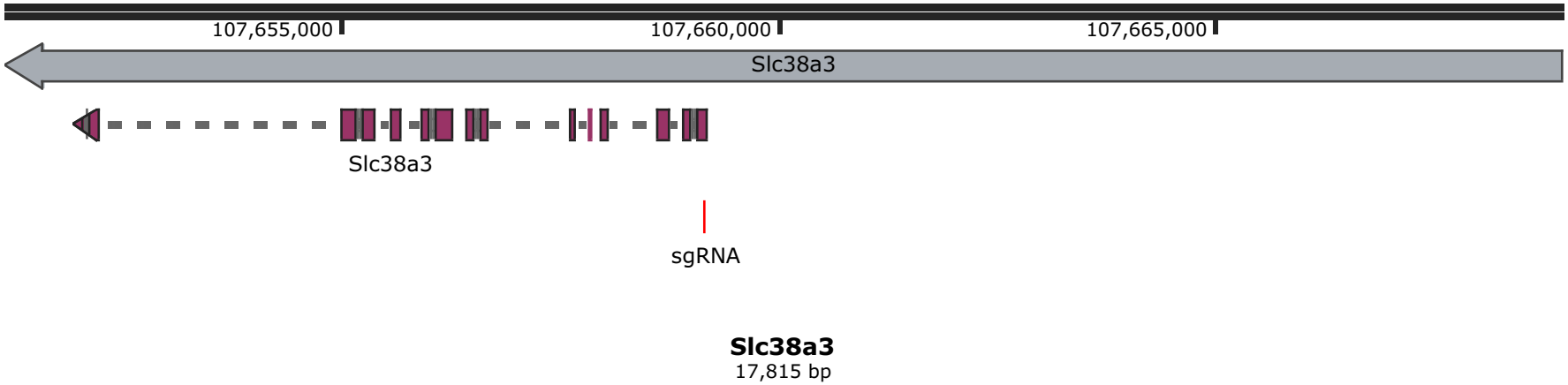

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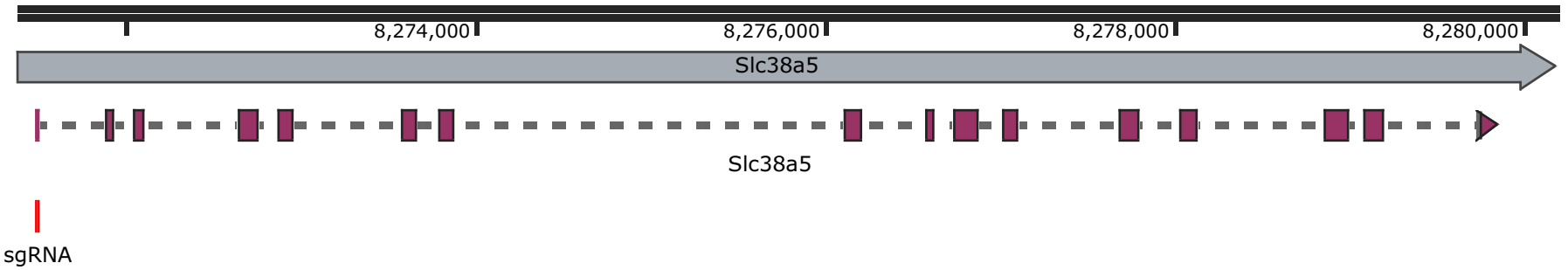

Slc38a5
8799 bp