Supplementary Figure 1


## Supplementary Figure 2




## Supplementary Figure 3



正




|







h $\sqrt[10]{\text { AD GWAS signal in the GPR141 locus }}$

$\qquad$
$\rightarrow$
$\qquad$





${ }^{*}$ n
 ,



 $\square$

```
\[
\stackrel{\underbrace{}_{\text {spope }} \rightarrow}{\leftarrow}
\]
```

$$
y_{y,}^{y_{1}}
$$










Supplementary Figure 4





