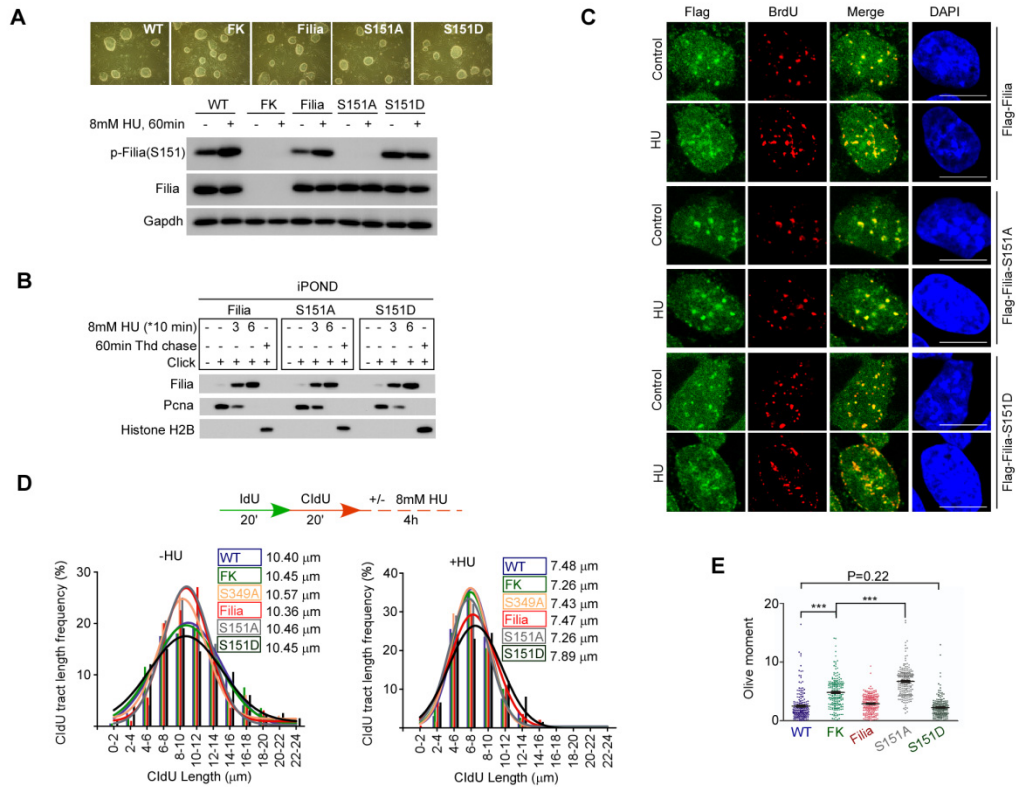


## Supplementary information, Figure S6



**Figure S6** Phosphorylation of serine 151 of Filia is required for the stalled fork restart but not nascent DNA protection. **(A)** Establishment of FiliaS151A- and FiliaS151D-rescued ESCs. Upper panel showed the morphology of wild-type (WT), *Filia*-knockout (FK), *Filia*-rescued (*Filia*), *Filia*S151A-rescued (S151A) and *Filia*S151D-rescued (S151D) ESCs. **(B)** iPOND showed that *Filia*S151A and *Filia*S151D normally localized on replication forks. **(C)** *Filia*, *Filia*S151A and *Filia*S151D co-localized with BrdU (nascent DNA) under the normal or HU treatment condition. **(D)** *Filia*S151A or *Filia*S151D did not affect the nascent DNA stability. **(E)** Higher level of DNA double strand breaks in *Filia*S151A-rescued ESCs than in WT, FK, *Filia*-rescued and *Filia*S151D-rescued cells under normal culture condition. Data are represented as mean  $\pm$  SEM. \*\*\* $P < 0.001$ . Scale bar, 10  $\mu$ m.