



**Supplementary information, Figure S6** A schematic model for cell hierarchy and lineage relations in *Drosophila* GSSC lineage. GSSCs can be specifically marked by  $DI$ , and  $DI^+$  GSSCs will direct their immediate daughters (GBs) towards CC/ IS cell differentiation via activating Notch signaling. Dpp signaling is epistatic to Notch for CC cell specification. The  $DI^+$  GSSCs can be converted to  $DI^{low}$  or  $DI^-$  GSSCs, whose immediate daughters will not have Notch activation and can either directly differentiate into enteroendocrine cells or indirectly via a transient progenitor cell stage. Therefore, differential Notch activity separates copper/interstitial cell lineage from enteroendocrine cell lineage during GSSC differentiation.