



*Figure 1. Distinct division of labour between topoisomerase II isoforms during organismal development. The expression of TOP2 $\alpha$  and TOP2 $\beta$  is characteristic of dividing, pluripotent and postmitotic, differentiated cells, respectively. Common targets of TOP2 $\alpha$  and TOP2 $\beta$  are housekeeping genes, while unique targets are involved in proliferation/pluripotency and neurogenesis, respectively. In addition, TOP2 $\alpha$  primes developmental genes in ES cells for activation and occupancy by TOP2 $\beta$  upon differentiation.*