



Figure 2. Synthesis, circulation and uptake of transthyretin. (a) Transthyretin (TTR) tetramer (red circles) is synthesised by the choroid plexus of the brain and by the liver. The mechanisms underlying delivery and uptake of TTR within and out of the brain are not known. (b) The tetramer circulates in plasma bound to retinol-binding protein (RBP; green circle), thereby providing a transport function for vitamin A; and a small proportion of TTR binds high-density lipoproteins (HDLs; yellow bar). (c) TTR is degraded in kidney and liver, as well as muscle and skin (not shown). In the kidney tubules, TTR is taken up by megalin [a member of the low-density lipoprotein (LDL) receptor family]; in liver, an as yet unidentified receptor that binds receptor-associated protein (RAP) (a binding characteristic of LDL receptors) is responsible for TTR uptake (**fig002msp**).