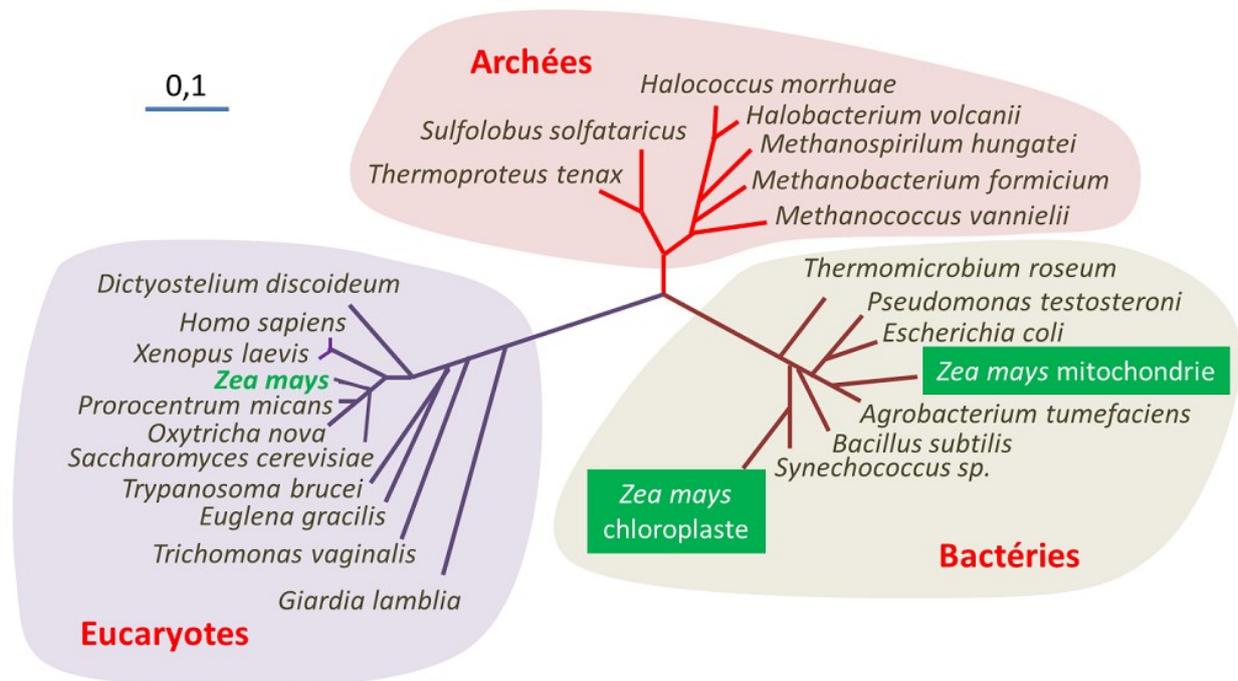
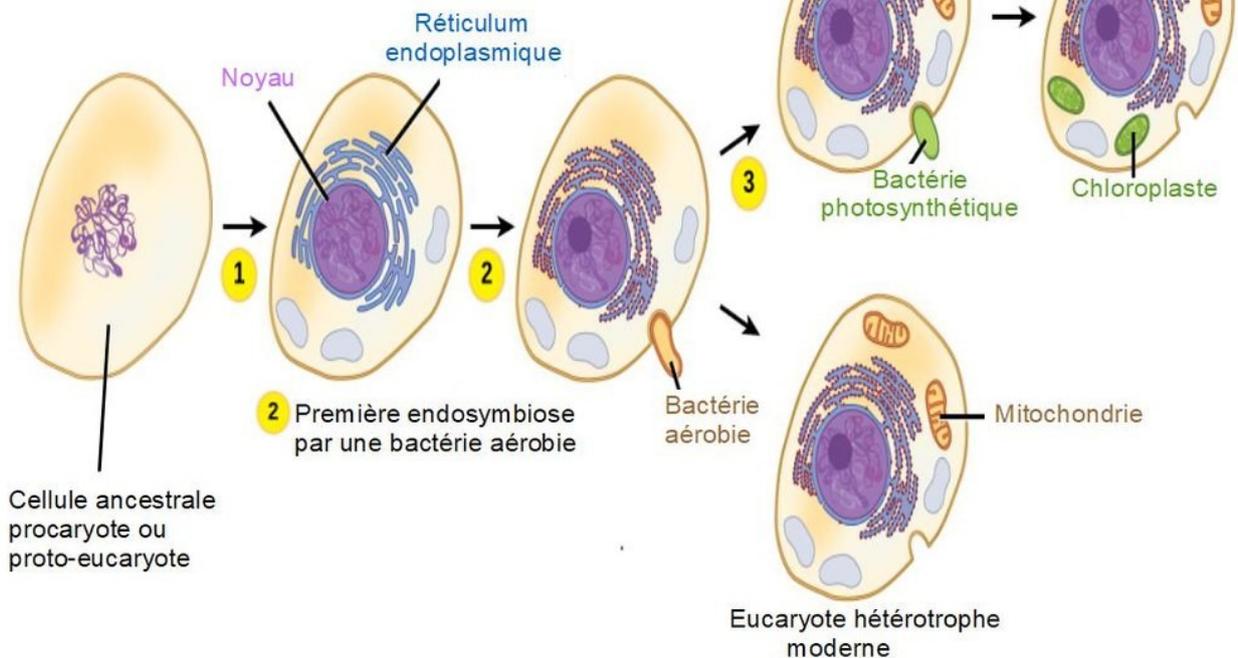


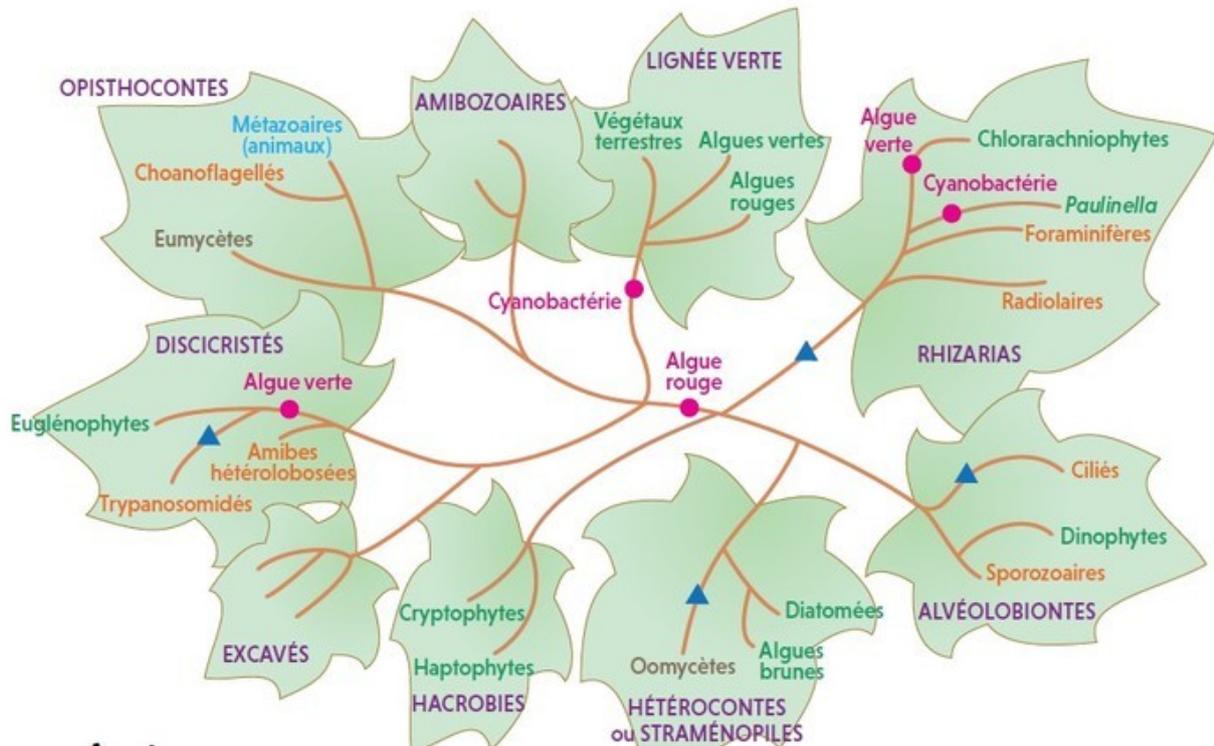
1 L'invagination de la membrane d'une cellule ancestrale donne naissance à un système de cytomembranes (noyau et réticulum endoplasmique)

3 Seconde endosymbiose par une bactérie photosynthétique

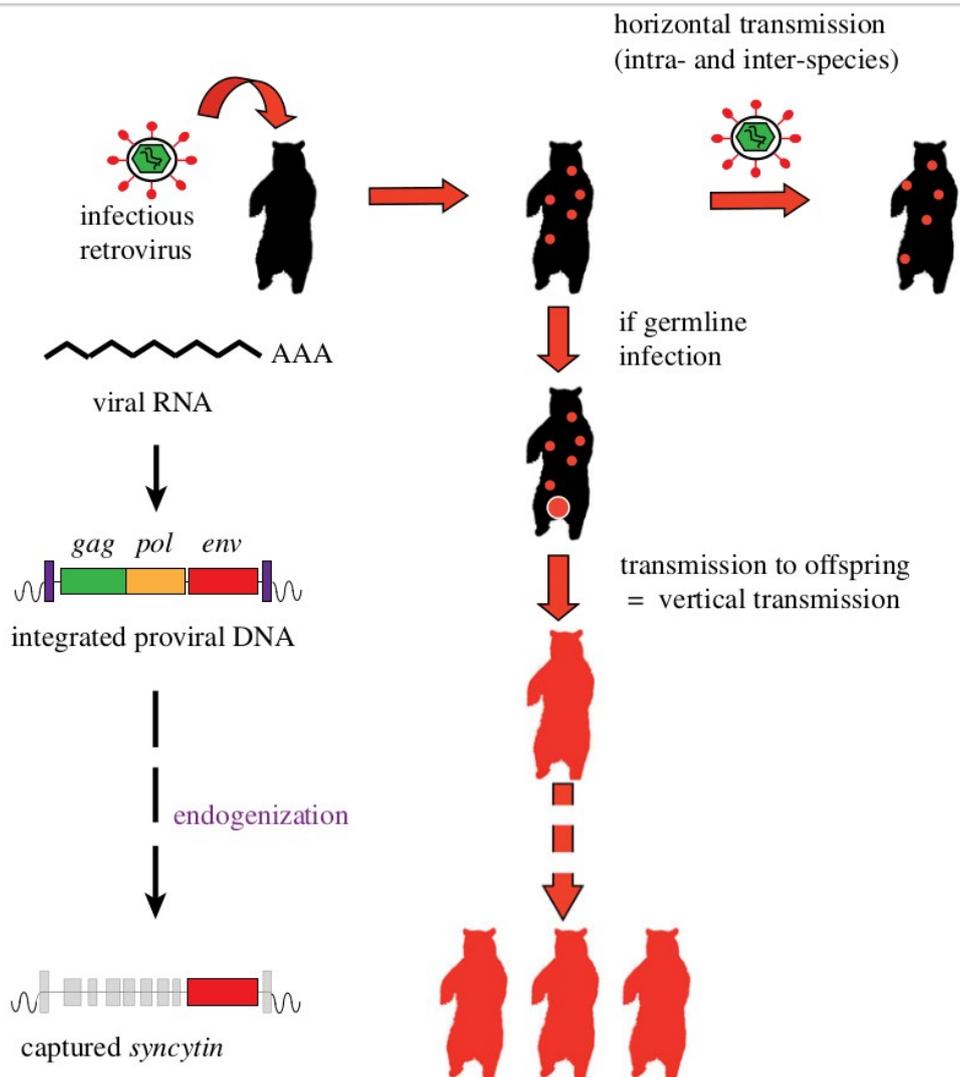
Eucaryote autotrophe moderne



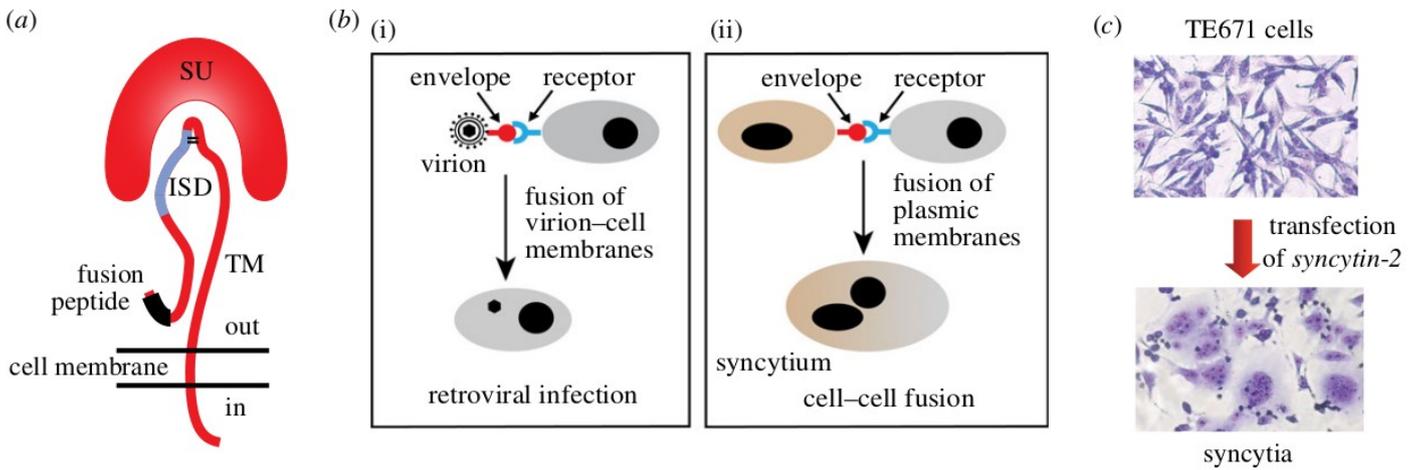
Endosymbiose



Place des endosymbioses dans l'arbre phylogénétique



Hypothèse d'une origine rétrovirale du gène de la syncytine



Effets de la syncytine sur la fusion des cellules

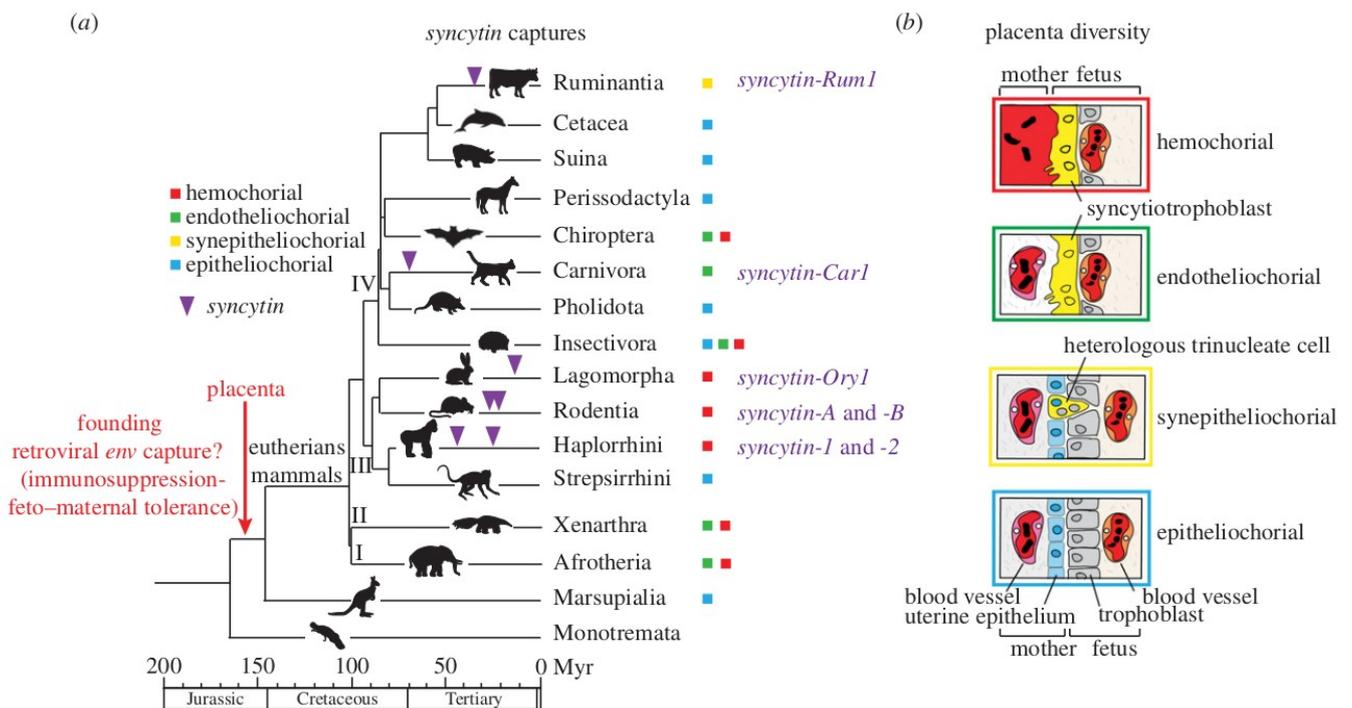
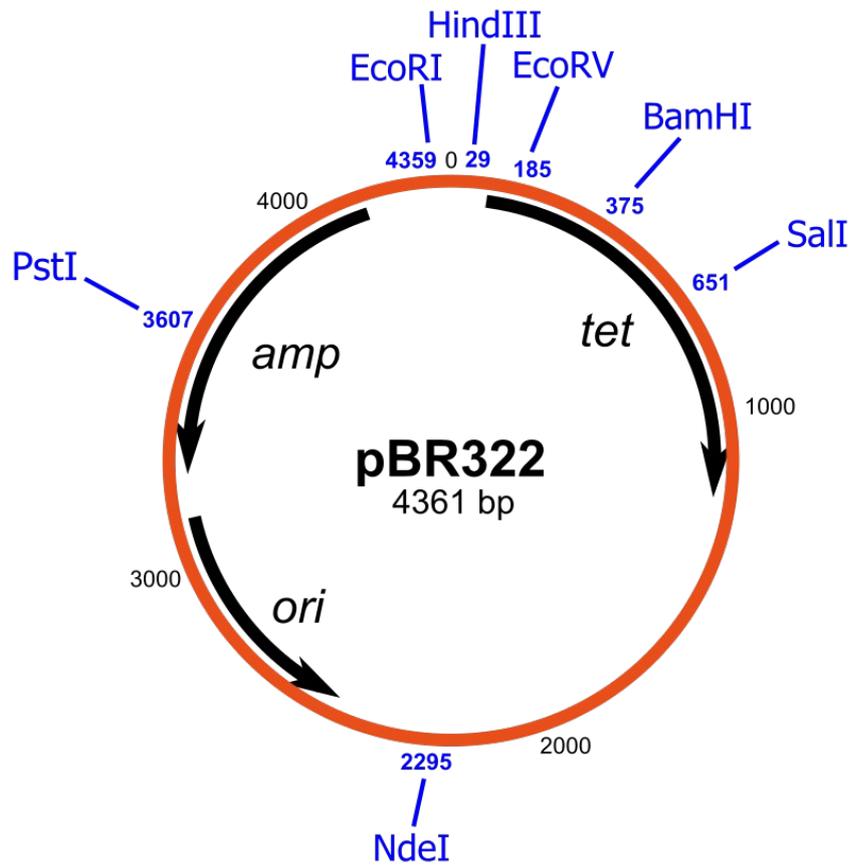
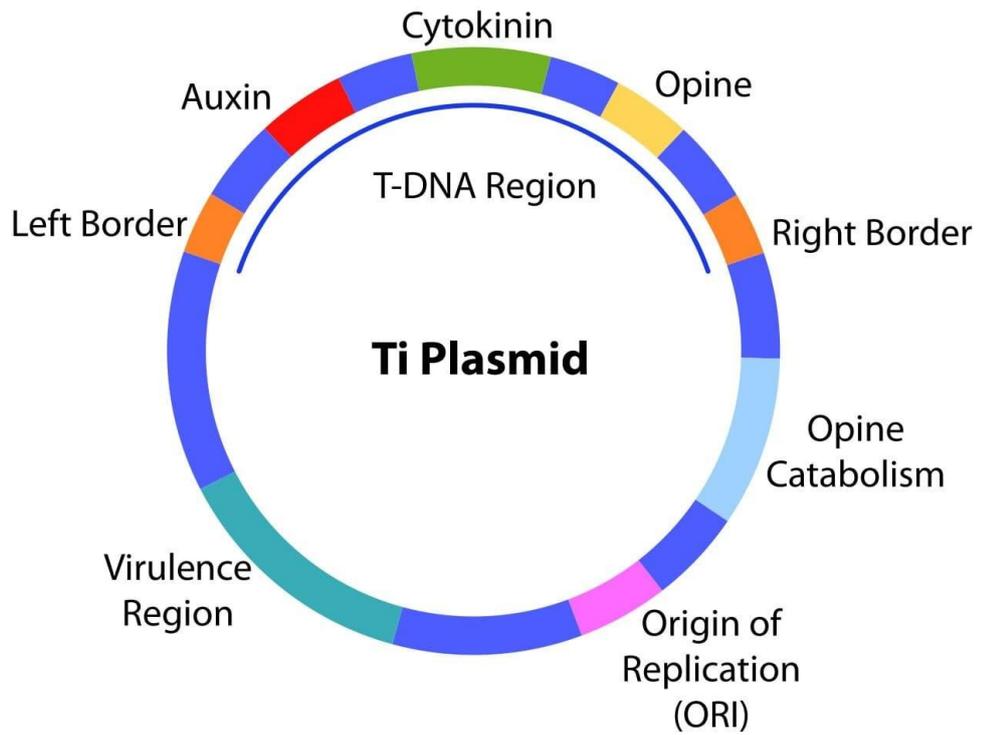


Figure 5. Multiple *syncytin* gene captures and diversity of placental structures in eutherian mammals. (a) Phylogenetic tree of mammals, with the four major clades of eutherians: (I) Afrotheria, (II) Xenarthra, (III) Euarchontoglires and (IV) Laurasiatheria (adapted from Meredith *et al.* [61]). The four basic types of placentation are indicated by coloured squares (the colour code corresponds to that of the boxes that frame the images shown to the right). The time of insertion of the different *syncytin* genes identified to date is indicated. Branch length is proportional to time (in million years, Myr). (b) Schematic colour-coded representation of the maternal–fetal interface in the four main types of placental structures. Placental types are classified from top to bottom in the order of decreasing extent of syncytialization and invasive properties.

Place de l'acquisition de de la syncytine dans l'arbre phylogénétique



Plasmide artificiel pBR 322



Plasmide T d'Agrobacterium tumefaciens