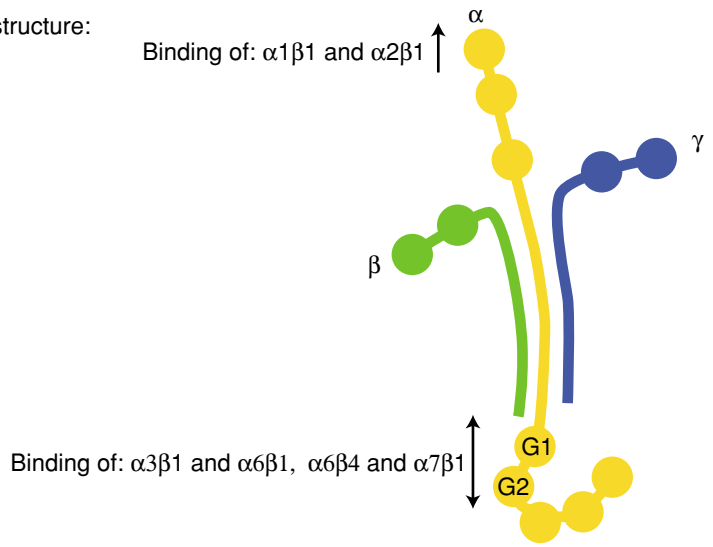
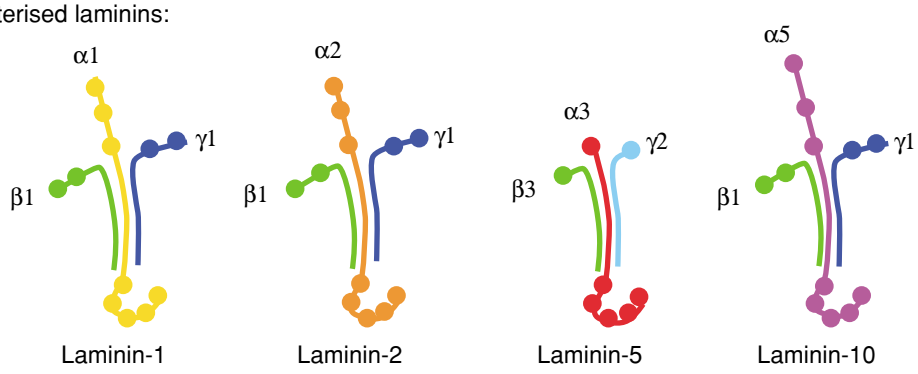
a Laminin structure:



b Four well-characterised laminins:



c Integrin binding:

	Laminin-1	Laminin-2	Laminin-5	Laminin-10
α2β1	Yes	Yes	No	Yes
α3β1	Weak	Weak	Yes	Weak
α7β1	Yes	Yes	No	Maybe
α6β4	Yes	Yes	Yes	Yes

Laminin structure and laminin-binding integrins

Figure 3. Laminin structure and laminin-binding integrins (*see next page for legend*) **(fig003jbs)**.

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Figure 3. Laminin structure and laminin-binding integrins. (a) Laminins are αβγ heterotrimeric proteins. The N-terminal globular domains of the β and γ chains are important in laminin polymerisation (self-assembly); in addition, two main integrin-binding regions have been mapped to (1) the N-terminal globular domain of the α1-chain short arm (integrins α1β1 and α2β1) and (2) the globular domains (G1, G2) of the α1-chain long arm (integrins α3β1, α6β1, α6β4 and α7β1). (b) Schematic representation of the four best-characterised laminins – laminin-1, -2, -5 and -10 – and identification of their corresponding preferential integrins. Laminin-1, -2 and -10 differ only by their α chain (they all share the same β1 and γ1 chains). Laminin-5, which assembles as a precursor within the cell, undergoes extensive proteolytic processing of the α3 and γ2 chains in the extracellular environment. Among the main laminin-binding integrins, α2β1 can bind most laminins with intact short arms, while α6β4 can recognise all of them. The integrin α3β1 binds to most laminins but exhibits a much higher affinity for α3-chain-containing laminins. Finally, integrin α7β1 has so far only been demonstrated to serve as a receptor for laminin-1 and -2 (Refs 9, 12, 13, 14) **(fig003jbs)**.

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