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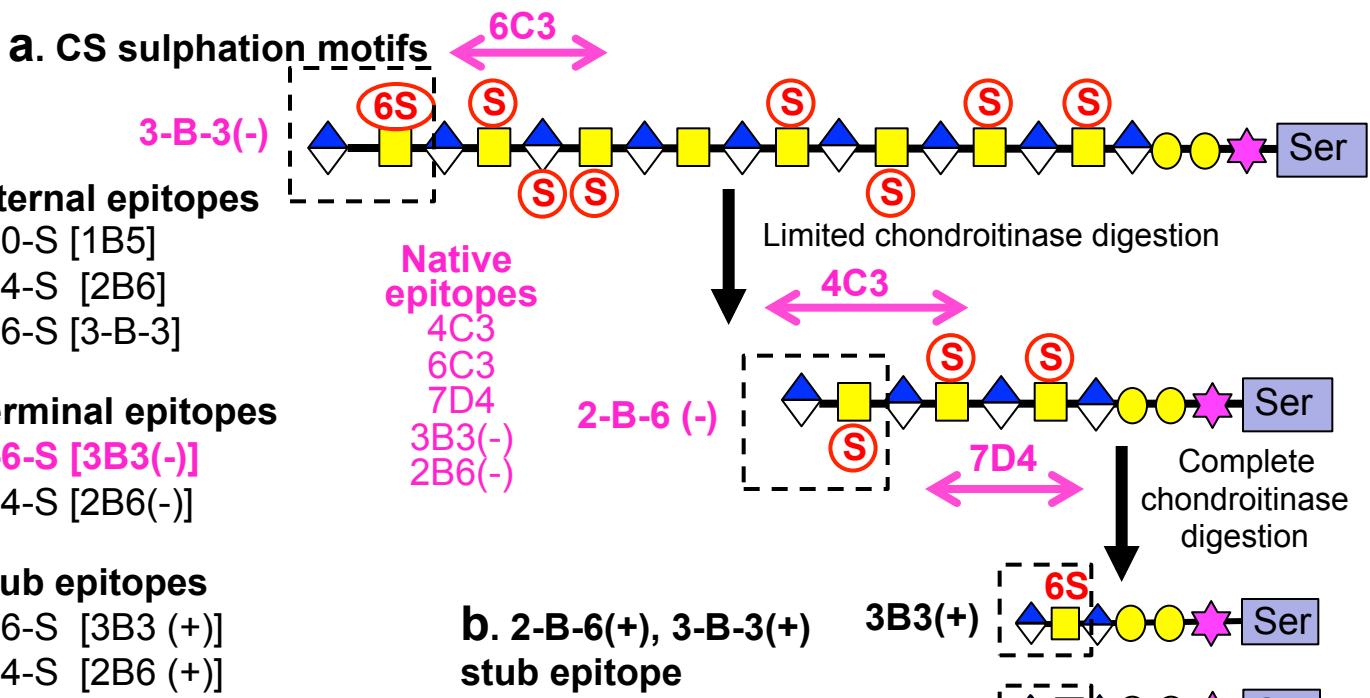
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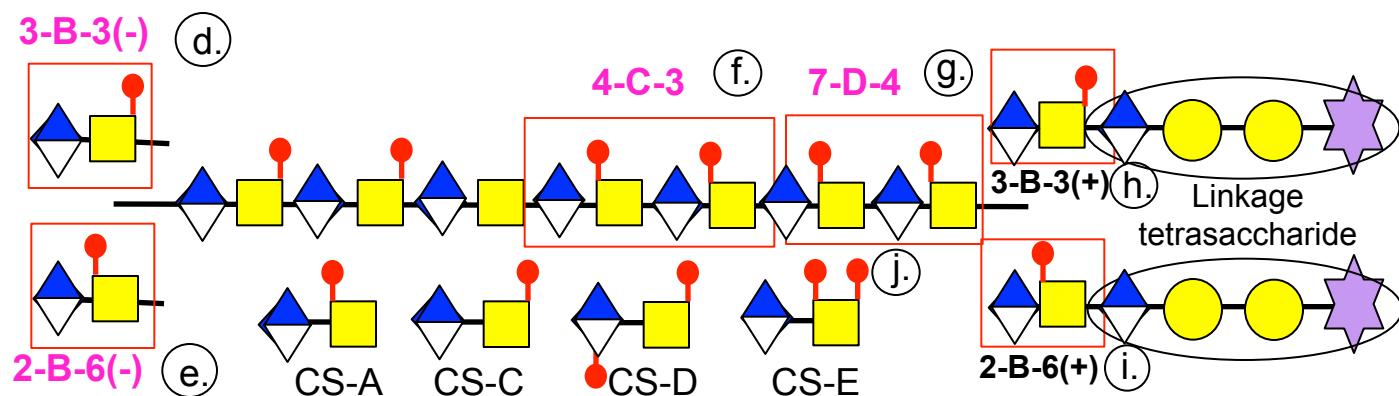
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C. CS Sulphation patterns



CS disaccharide nomenclature based on sulphation motifs

CS isomer	Sulphation Position(s)	Nomenclature
Chondroitin	0 S	CS-O
Chondroitin-4-O sulphate	4 S	CS-A
Chondroitin-6-O sulphate	6 S	CS-C
Chondroitin-2, 4-O sulphate	2,4 S	CS-B
Chondroitin-2, 6-O sulphate	2,6 S	CS-D
Chondroitin-4, 6-O sulphate	4,6 S	CS-E
Chondroitin-2, 4, 6-O sulphate	2,4,6 S	CS-T

Key: (+)/(-) = ± chondroitinase ABC

★ D-Xyl ○ D-Gal ■ N-AcGalNH₂

△ D-GlcUA

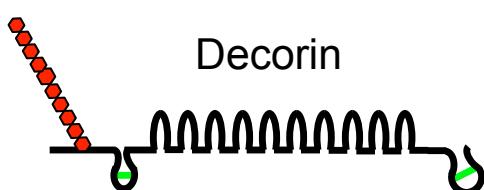
2S, 4S, 6S sulphation motifs

◆ L-IduA

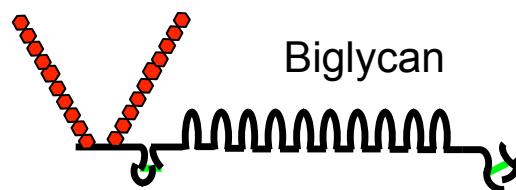
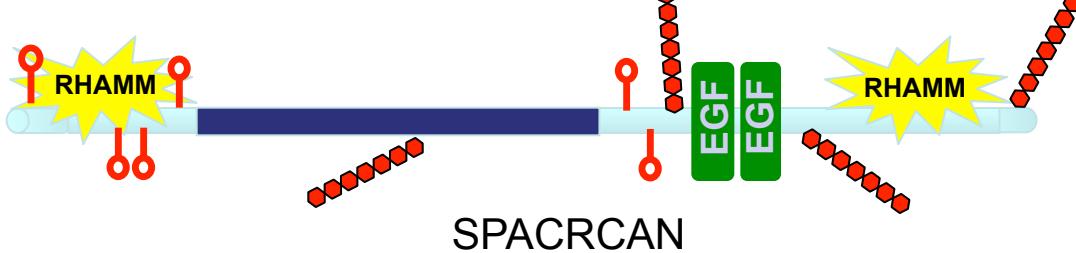
● SO₄

a.**b.**

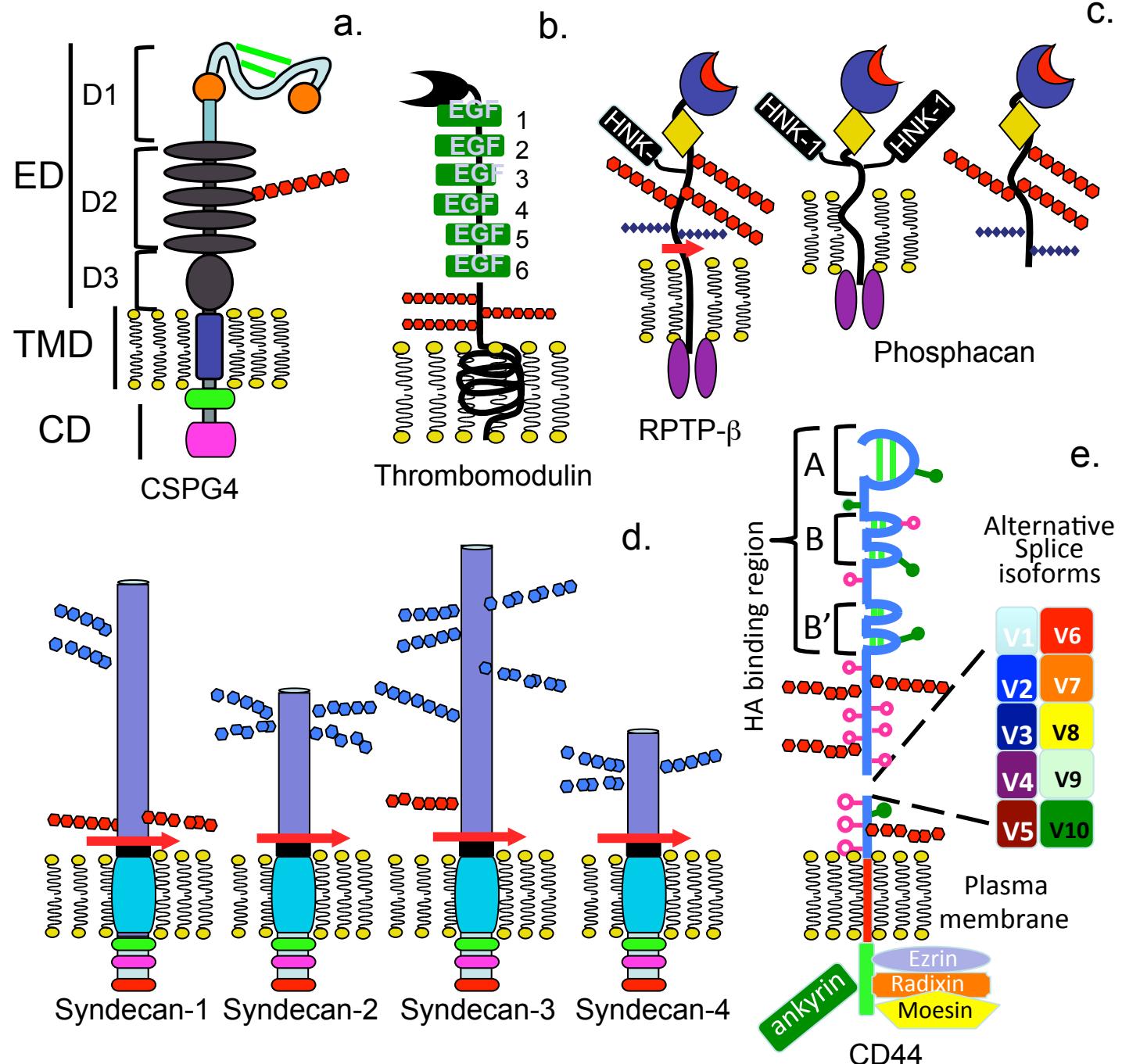
Decorin



Biglycan

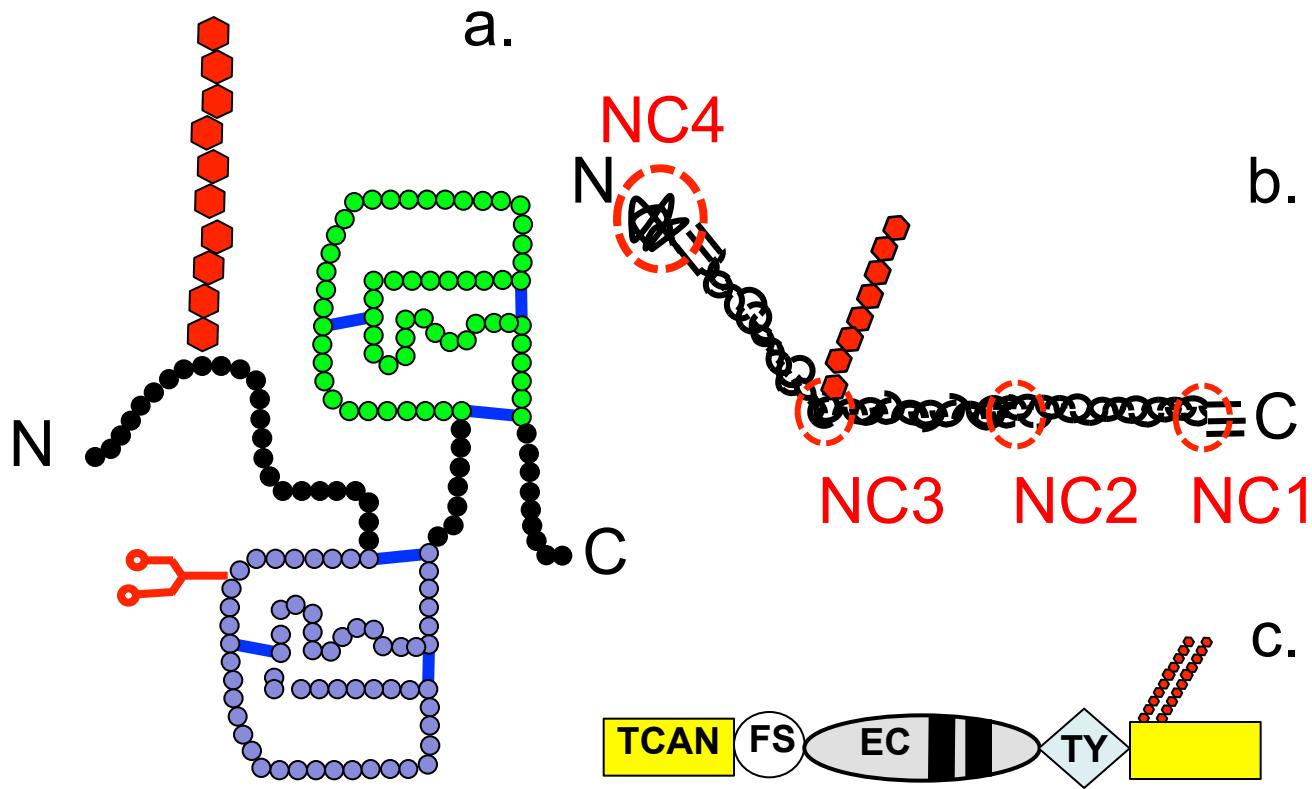
**c.****Key:**

Signal peptide	Hyaline peptide domain	Immunoglobulin (IG) link module HA	Epidermal growth factor repeat (EGF), C type lectin (CTL) domains
SUSHI protein module	Binding region Aggrecan-like G1	Leucine rich repeats	RHAMM-like HA binding region
O-linked oligosaccharides			

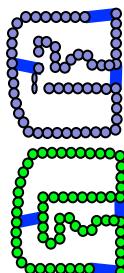


Key:

- CAH module
- Fibronectin III
- Syndecan TM domain
- C1 region
- Variable region
- C2 region
- GAG side chains
- CS
- HS
- KS
- HNK-1 trisaccharide
- HNK-
- lipid bilayer
- TM Lectin domain
- PTP tyrosine phosphatase domains
- Disulphide stabilised D1 globular domains
- NG2 D2 core repeat modules
- N-linked
- O-linked Le X
- Protease site
- PR-PKCa domain
- PDZ-ERK-1, 2



Key:



Kunitz domain-1
(disulphide stabilised)



Kunitz domain-2
(disulphide stabilised)



O-linked oligosaccharides

TCAN

FS

EC

TY



Testican specific domain

Follistatin domain

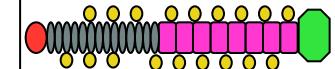
Ca binding domain

Thyroglobulin domain

Testican GAG (**CS**)
attachment domain

a.**Key:**

Tenascin-R



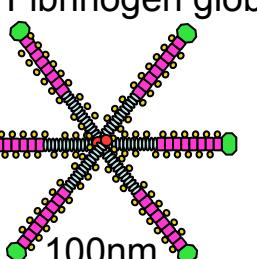
HNK-1

N-terminal domain

FN III repeats

EGF-like repeats

Fibrinogen globe

100nm
hexabrachion**b.**

COL II



HA



Link

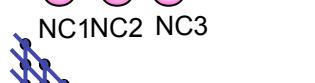


Aggrecan

IX collagen

NC4

NC1NC2 NC3



VI collagen



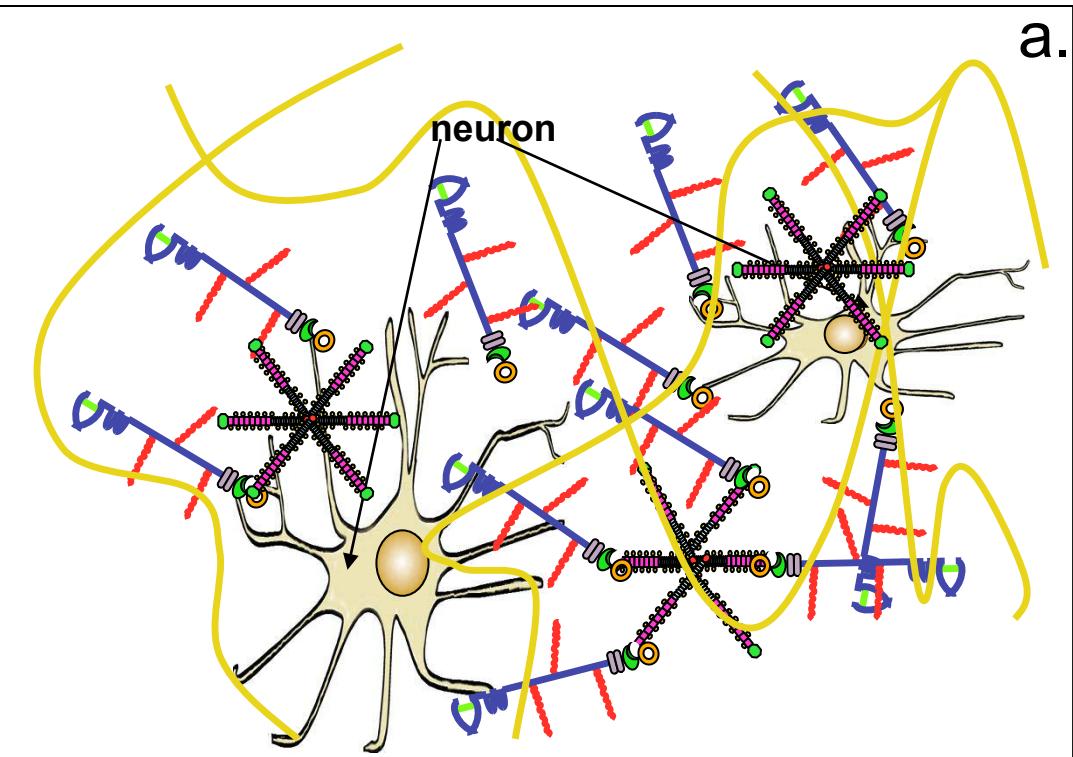
Matrilin-3



COMP

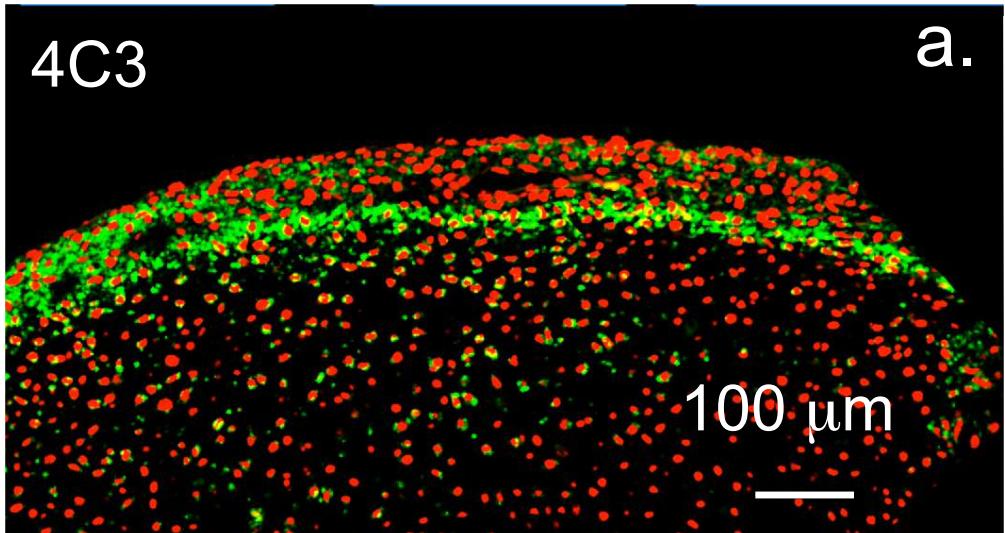


Biglycan



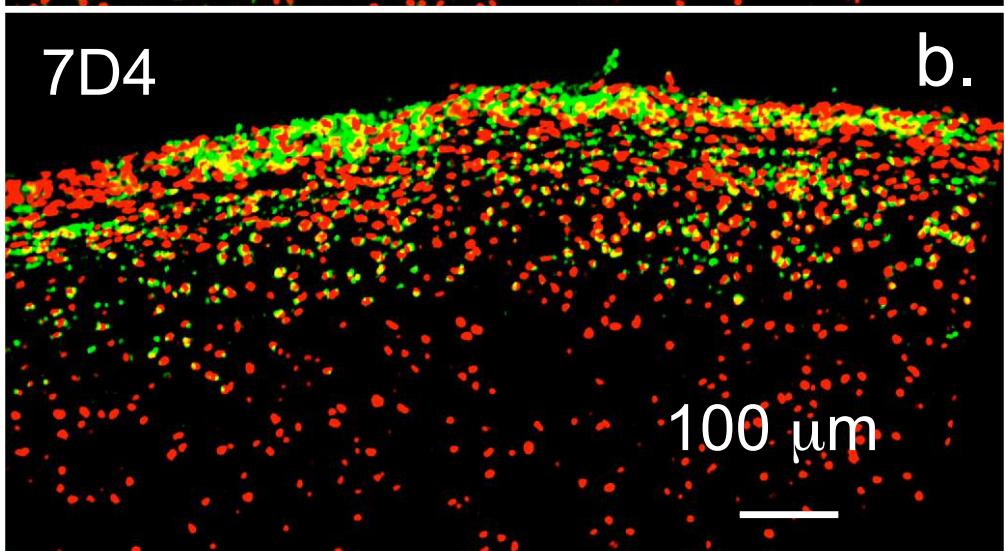
4C3

a.



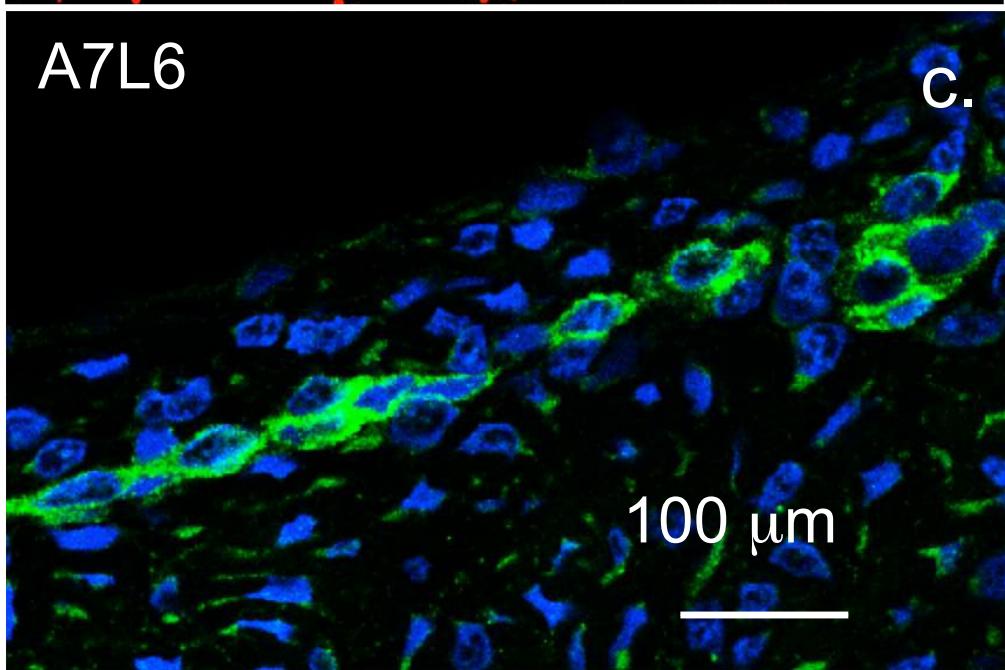
7D4

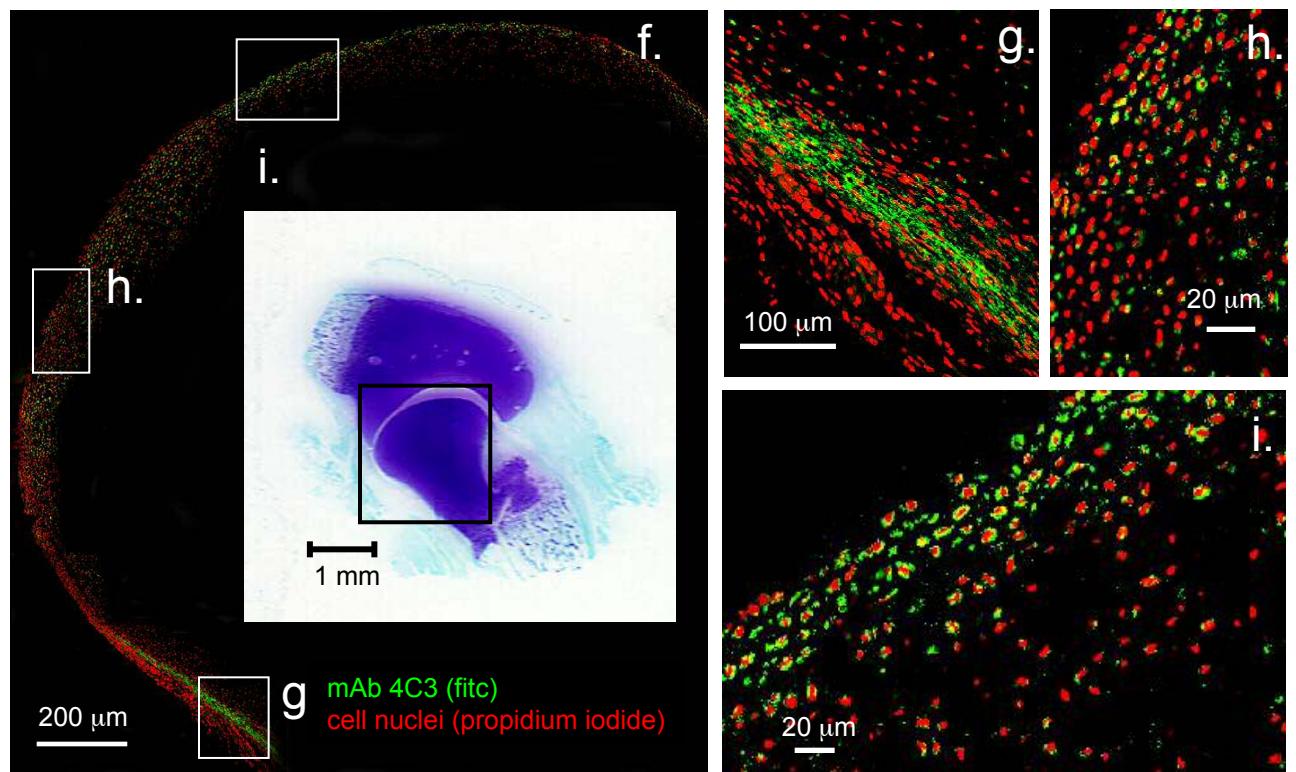
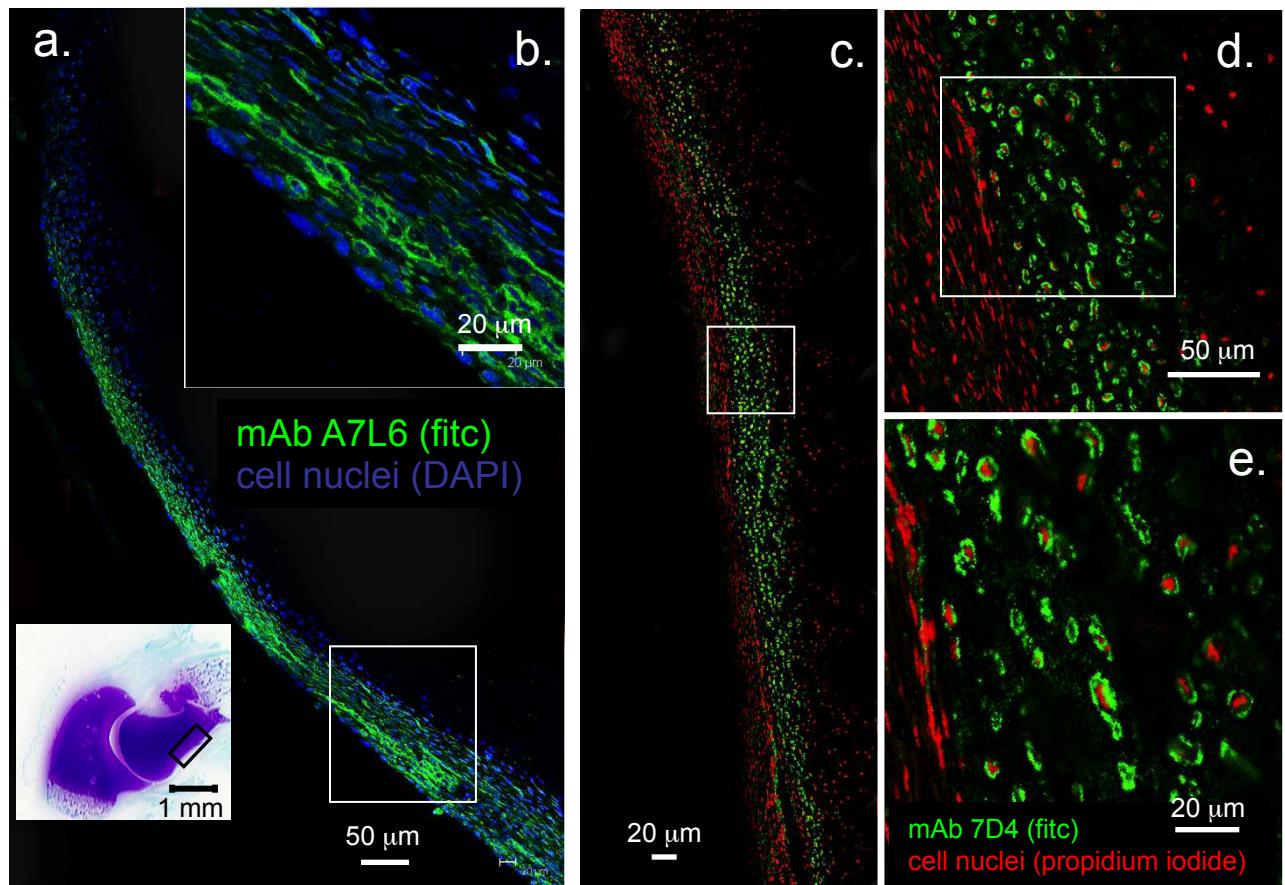
b.

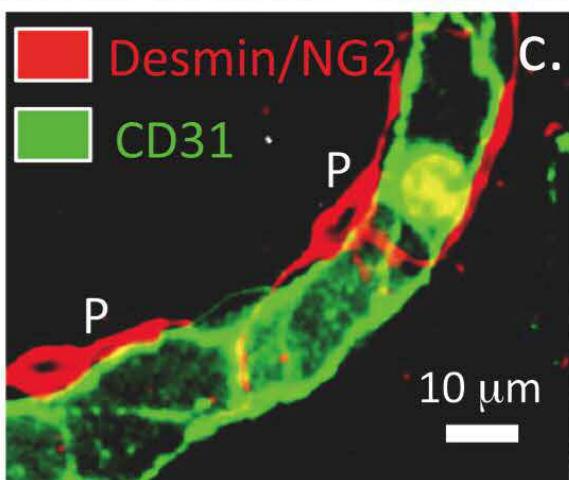
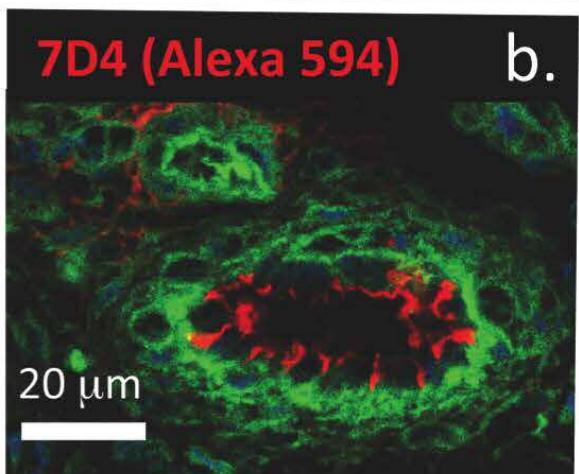
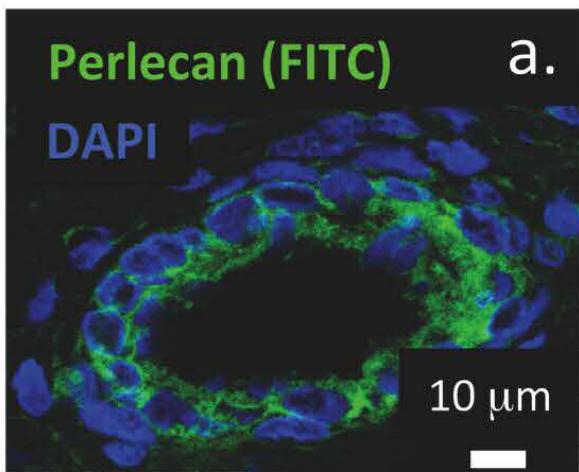


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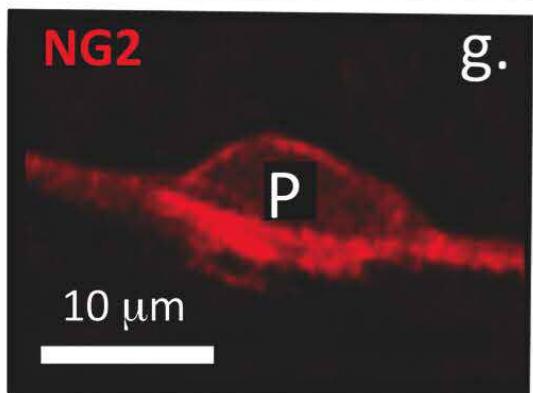
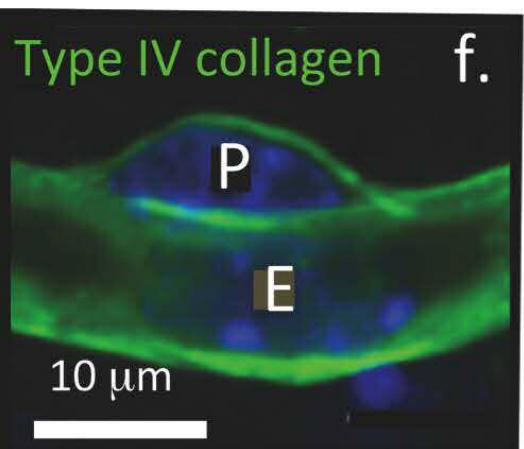
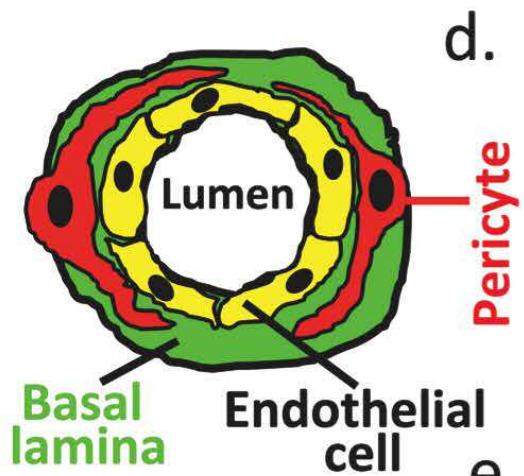
c.

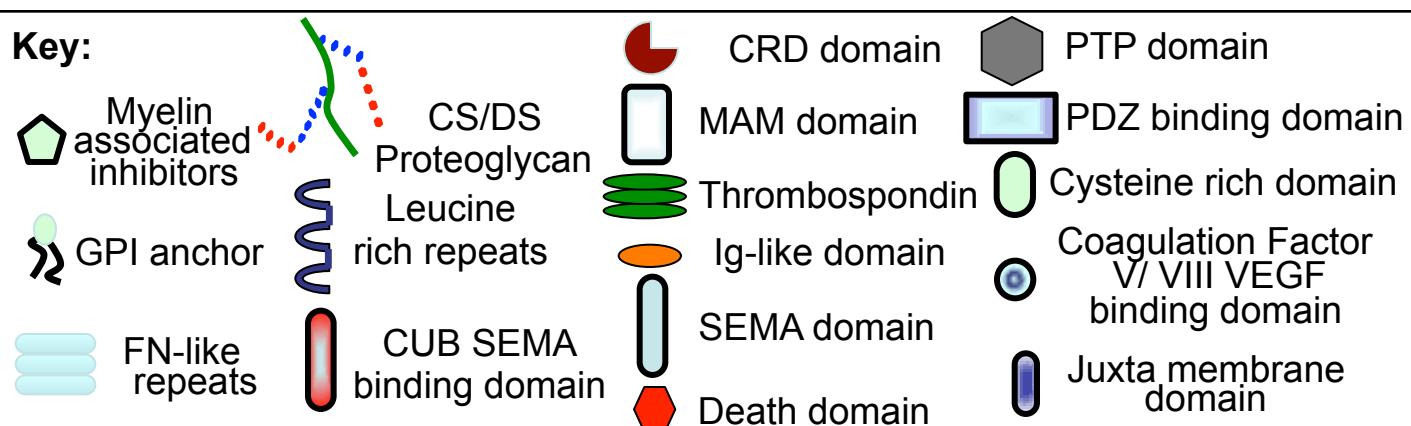
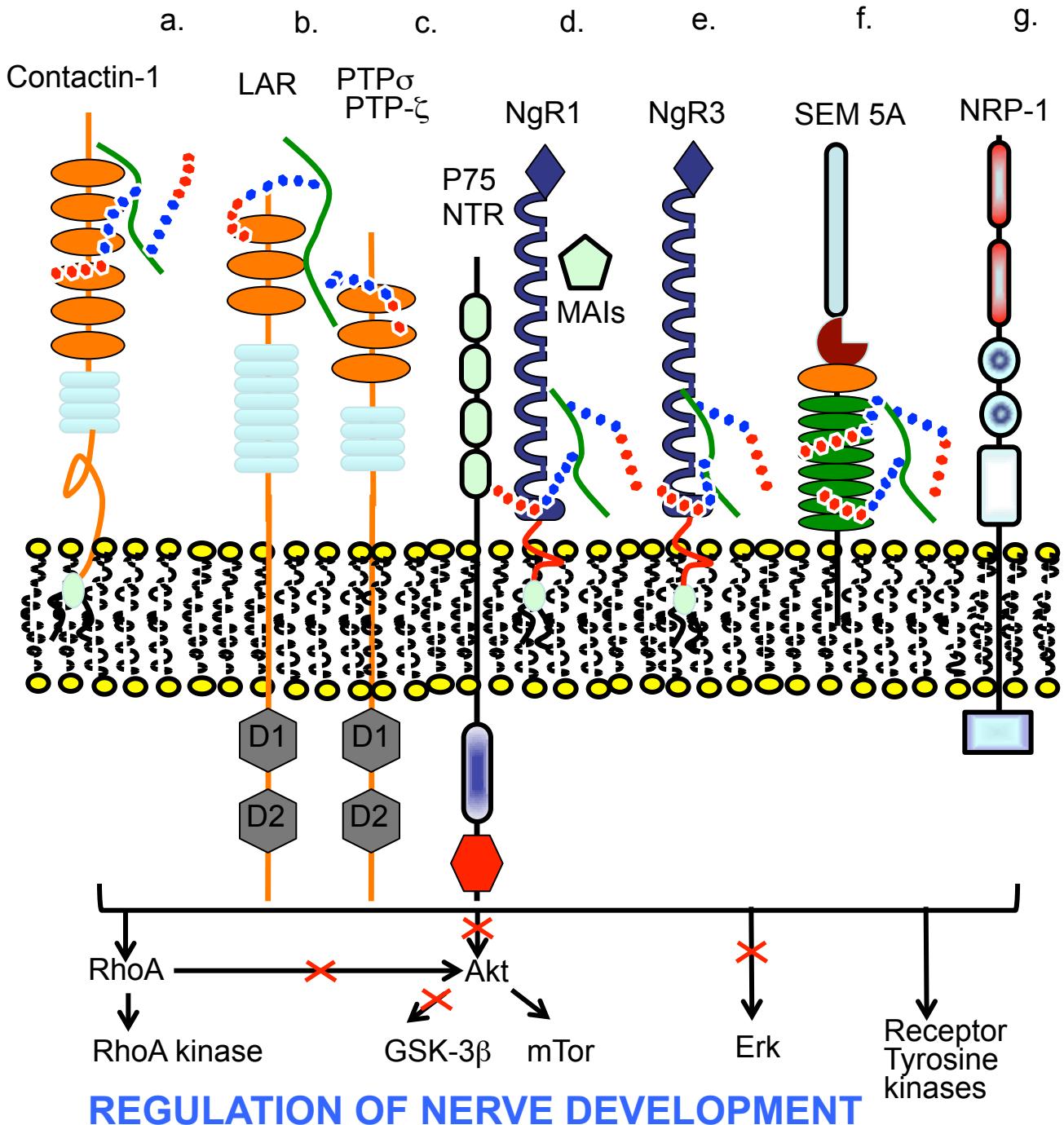


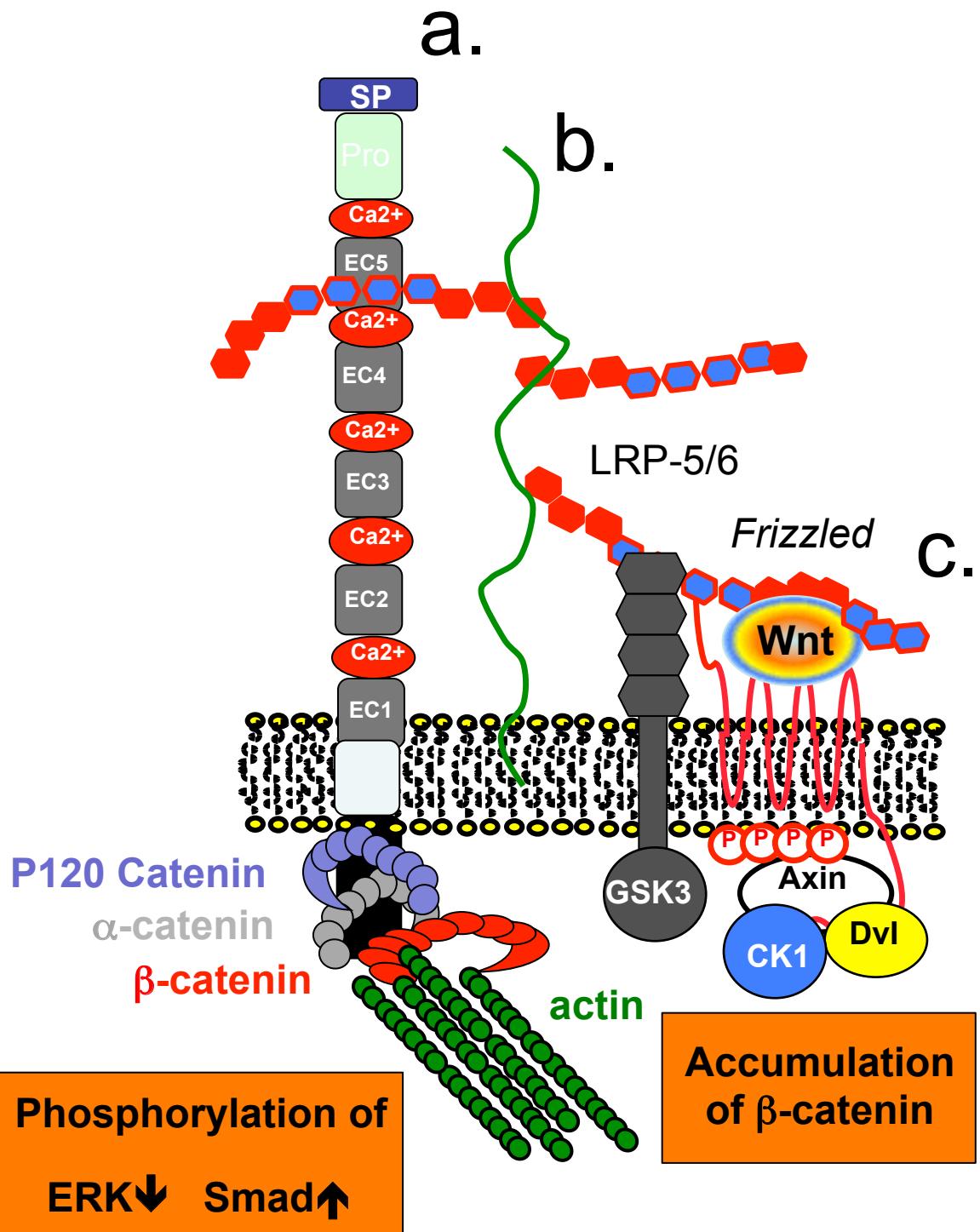




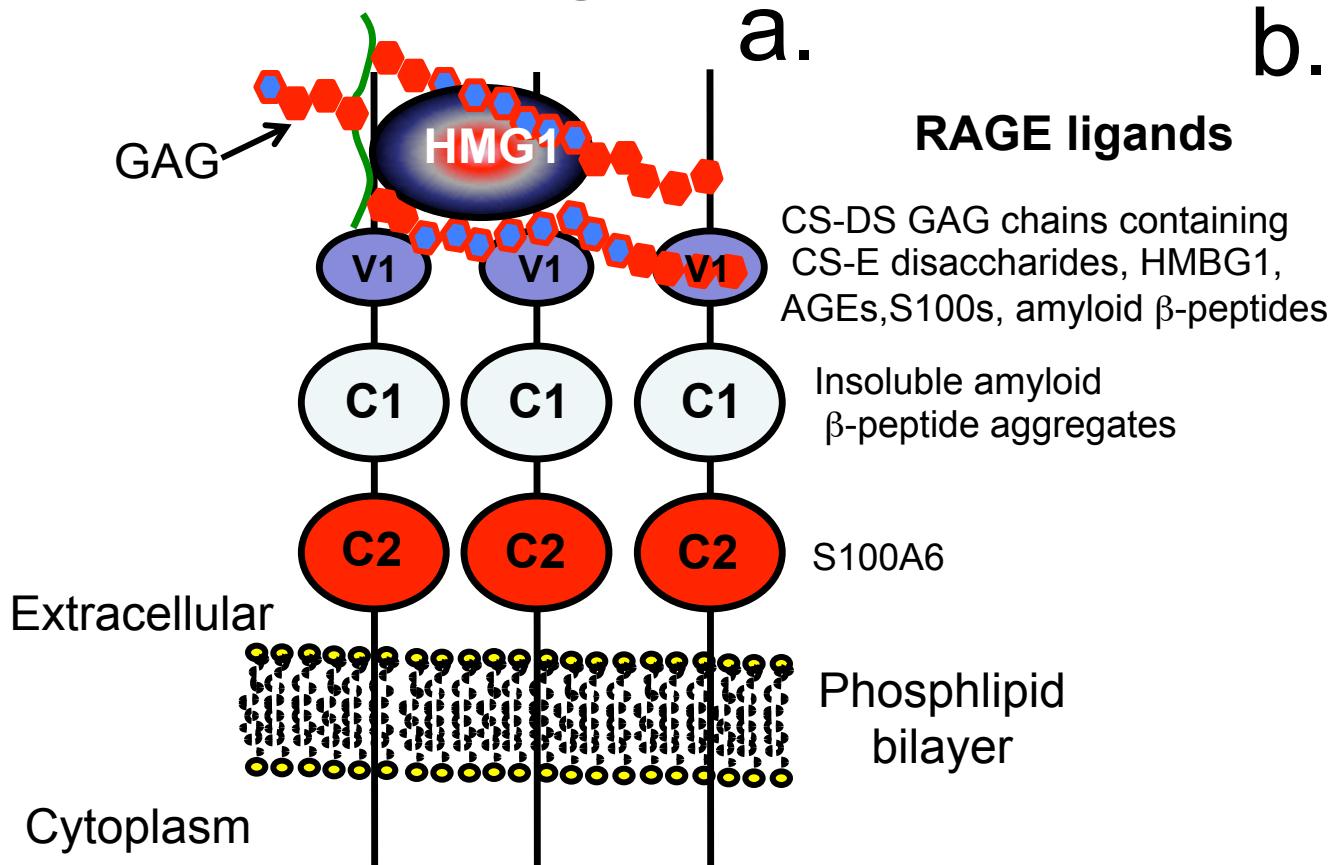
P pericyte
E endothelial cell







RAGE



a.

b.

C.

