

**Table S1. Structural features of proteins**

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**Table S2. Mechanical switches**

Protein	Considered as a switch (Yes/Likely/Unknown)	Reference, preprint doi
Actin	Unknown	(De La Cruz and Gardel, 2015)
$\alpha$ -actinin	Yes	(Le et al., 2017)
Ankyrin	Unknown	
BCAM	Unknown	
Cadherin	Likely	(Borghi et al., 2012; Conway et al., 2013)
Catenin	Yes	(Ishiyama et al., 2013; Yao et al., 2014)
Caveolin	Unknown	(Moreno-Vicente et al., 2018)
Collagen	Likely	(Ames et al., 2016)
Desmocollin	Unknown	
Desmoglein	Likely	(Baddam et al., 2018; Uttagomol et al., 2019)
Desmplakin	Likely	(Daday et al., 2017; Price et al., 2018)
Dynamin	Likely	(Danino and Hinshaw, 2001)
Dystonin	Unknown	
Dystrobrevin	Unknown	
Dystroglycan	Unknown	
Dystrophin	Likely	(Le et al., 2018)
Emerin	Unknown	
Fibrinogen	Yes	(Butera and Hogg, 2020)
Fibronectin	Yes	(Ingham et al., 2004; Klotzsch et al., 2009; Smith et al., 2007; Zhong et al., 1998)
Filamin	Yes	(Huelsmann et al., 2016)
ICAM	Likely	(Liu et al., 2010), <a href="https://doi.org/10.1101/2020.06.29.177816">https://doi.org/10.1101/2020.06.29.177816</a>
Integrin	Yes	(Friedland et al., 2009)
Kindlin	Likely	(Jahed et al., 2019)
Lamin A/C	Likely	(Cho et al., 2019)
Lamin B1/B2	Unknown	(Vahabikashi et al., 2022)
Laminin	Unknown	
NCAM	Unknown	
Nephrin	Unknown	
Nesprin 3	Unknown	
Nesprin 1/2	Likely	(Déjardin et al., 2020)
Netrin	Likely	(Moore Dr. et al., 2012)
Plakoglobin	Likely	<a href="https://doi.org/10.1101/2022.03.13.484158">https://doi.org/10.1101/2022.03.13.484158</a>
Plastin	Unknown	
Plectin	Likely	(Almeida et al., 2015; Suman et al., 2019)
Presenilin	Unknown	
Sarcoglycan	Unknown	
Sarcospan	Unknown	
Spectrin	Yes	(Day et al., 2017; Law et al., 2003; Moe and Cembran, 2020; Renn et al., 2019)
Sun	Unknown	(Donnaloja et al., 2019)
Syntrophin	Unknown	
Talin	Yes	See refs in main text
Tubulin	Likely	(Nasrin et al., 2021)
VCAM	Unknown	
Vinculin	Yes	(Grashoff et al., 2010)

**Table S3. Disease associations**[Click here to download Table S3](#)**References**

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