



Supplementary Figure 1 Human caldesmon gene and transcript variants.

Caldesmon (CALD1) gene structure on chromosome 7q33, showing exon (numbered boxes) and intron (lines) regions , transcript length in base pairs, and translation length (number of amino acids in the protein). CALD1 gene has 24 transcripts or splice variants (201-224) as described in Ensembl. Red transcripts (203-206, 208, 209, 211, 212, 214 and 222) are protein coding; as per either the Ensembl automatic annotation pipeline or manual curation by the VEGA/Havana project. A gold transcript (201 and 202) is identical between Ensembl automated annotation and VEGA/Havana manual curation protein coding. This transcript can be thought of as stable (unlikely to change). A blue transcript is non-coding (transcript 207, 210, 213, 215-219, 220, 221, 223, 224) (nonsense mediated decay, a process which detects nonsense mutations and prevents the expression of truncated or erroneous proteins; processed transcript: does not contain an open reading frame). Transcripts 202-206 and 222 can generate Fibro-type and HeLa-type I-caldesmon, transcript 205 (Fibro I-caldesmonI, 563aa), transcript 202 and transcript 204 (Fibro L-caldesmonII, 538aa), transcript 222 and transcript 203 (HeLa I-caldesmonI (557-558aa), and

transcript 206 (HeLa L-caldesmonII 532aa). Sources:
https://asia.ensembl.org/Homo_sapiens/Gene/Summary?db=core;g=ENSG00000122786;r=7:134744252-134970729;t=ENST00000393118. Accessed on 14 March 2022 11:38 PM. Editable at BioRender.