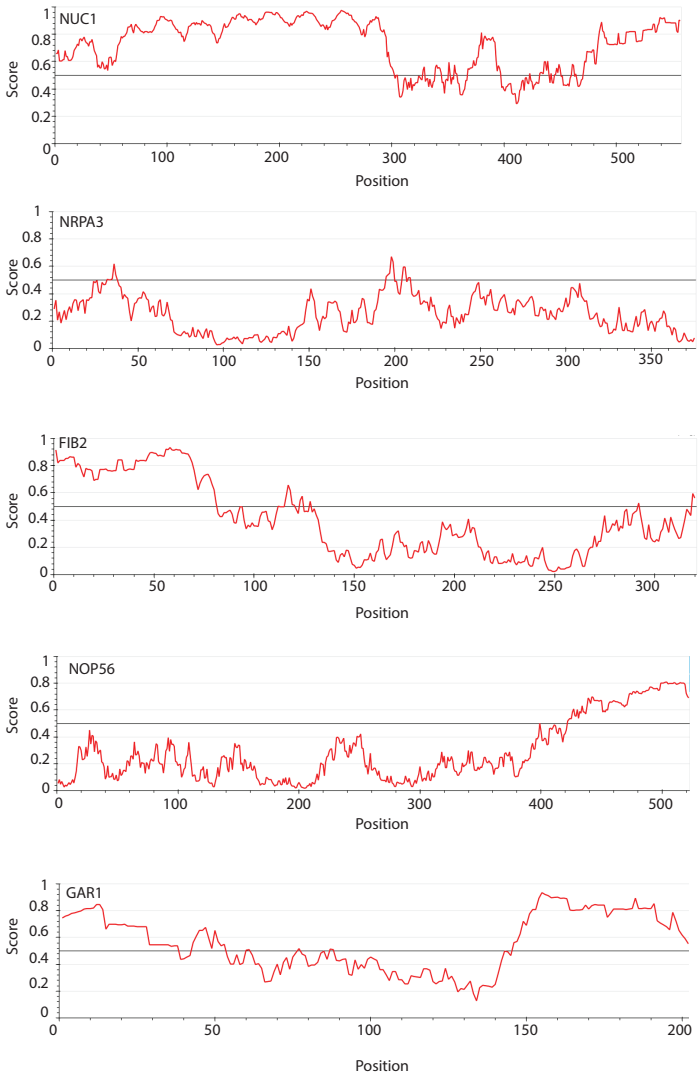

Figure S8. Intrinsically Disorder Regions (IDR) *in silico* of NRPA3, NUC1, FIB2, NOP56 and GAR1. IDRs have been described to drive the LLPS behavior of the nucleolus. FIB2 from the C/D Box complex displays a well-documented disordered region in its N-terminal domain. The major nucleolar factor NUC1 have tendency to disorder in its N-terminal, but also the C-terminal (GAR) domain. Similarly NOP56 found in the C/D box has region disorder in N- and -C terminal domains. GAR1 protein found in the H/ACA complexes has region disorder in C-terminal domains. In contrast, NRPA3 has not disordered region. The intrinsically disordered tendency was calculated by IUPred algorithm (www.iupred2a.elte.hu, accessed on August, 4 2023), a tendency to disorder is predicted when values per residue exceed the 0.5 IUPred scores.