**Supplementary Table 3.** Average values and standard errors of the mean of the RI , Brillouin shift , absolute density and longitudinal modulus for the cytoplasm and polyQ aggregates of 22 wild-type HeLa cells.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| compartment | RI  *n* | Brillouin shift  *ν*B [GHz] | absolute density  *ρ* [g/ml] | longitudinal modulus  *M’* [GPa] |
| cytoplasm | 1*.*3506 ± 0*.*0013 | 7*.*861 ± 0*.*014 | 1*.*020 ± 0*.*002 | 2*.*442 ± 0*.*009 |
| polyQ aggregate | 1*.*3856 ± 0*.*0018 | 8*.*789 ± 0*.*040 | 1*.*061 ± 0*.*003 | 3*.*051 ± 0*.*029 |