Supplementary Information (SI) for Soft Matter.

Retina Microrheology via Oscillatory Atomic Force Microscopy

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Supplemental Table 1. E' changing as a function of smoothing function window size and radius. No change above 5% was demonstrated, when compared to no filter, indicating the smoothing function did not significantly alter phase. A width of 3 and radius of 150 was used for all data in the main manuscript.

Frequency	**1**	**2.2**	**4.5**	**10**	**22**	**45**	**100**
No Smoothing	1005.248	1013.655	1071.358	1286.363	1213.967	1297.301	1178.507
Width3_Radius150	1005.364	970.0152	1071.33	1286.373	1213.992	1297.151	1178.358
Width5_Radius150	1005.503	970.1636	1071.218	1286.434	1213.975	1297.118	1178.396
Width3_Radius50	1005.364	970.0152	1071.33	1286.373	1213.992	1297.151	1178.358
Width3_Radius100	1005.364	970.0152	1071.33	1286.373	1213.992	1297.151	1178.358
Width3_Radius200	1005.364	970.0152	1071.33	1286.373	1213.992	1297.151	1178.358

Supplemental Table 2. E'' changing as a function of smoothing function window size and radius. No change above 7% was demonstrated, when compared to no filter, indicating the smoothing function did not significantly alter phase. A width of 3 and radius of 150 was used for all data in the main manuscript.

Frequency	**1**	**2.2**	**4.5**	**10**	**22**	**45**	**100**
No Smoothing	455.0994	336.8234	186.9805	277.6677	405.0565	743.8524	1248.449
Width3_Radius150	455.4686	312.7866	186.984	277.6758	405.1203	743.0369	1248.349
Width5_Radius150	456.3176	312.7816	186.9805	277.7536	405.1299	742.9732	1248.402
Width3_Radius50	455.4686	312.7866	186.984	277.6758	405.1203	743.0369	1248.349
Width3_Radius100	455.4686	312.7866	186.984	277.6758	405.1203	743.0369	1248.349
Width3_Radius200	455.4686	312.7866	186.984	277.6758	405.1203	743.0369	1248.349