SUPPLEMENTARY MATERIALS

Figure S1 Chromatograms of chloroquine and drug-loaded suspension without filtrations or centrifugation.

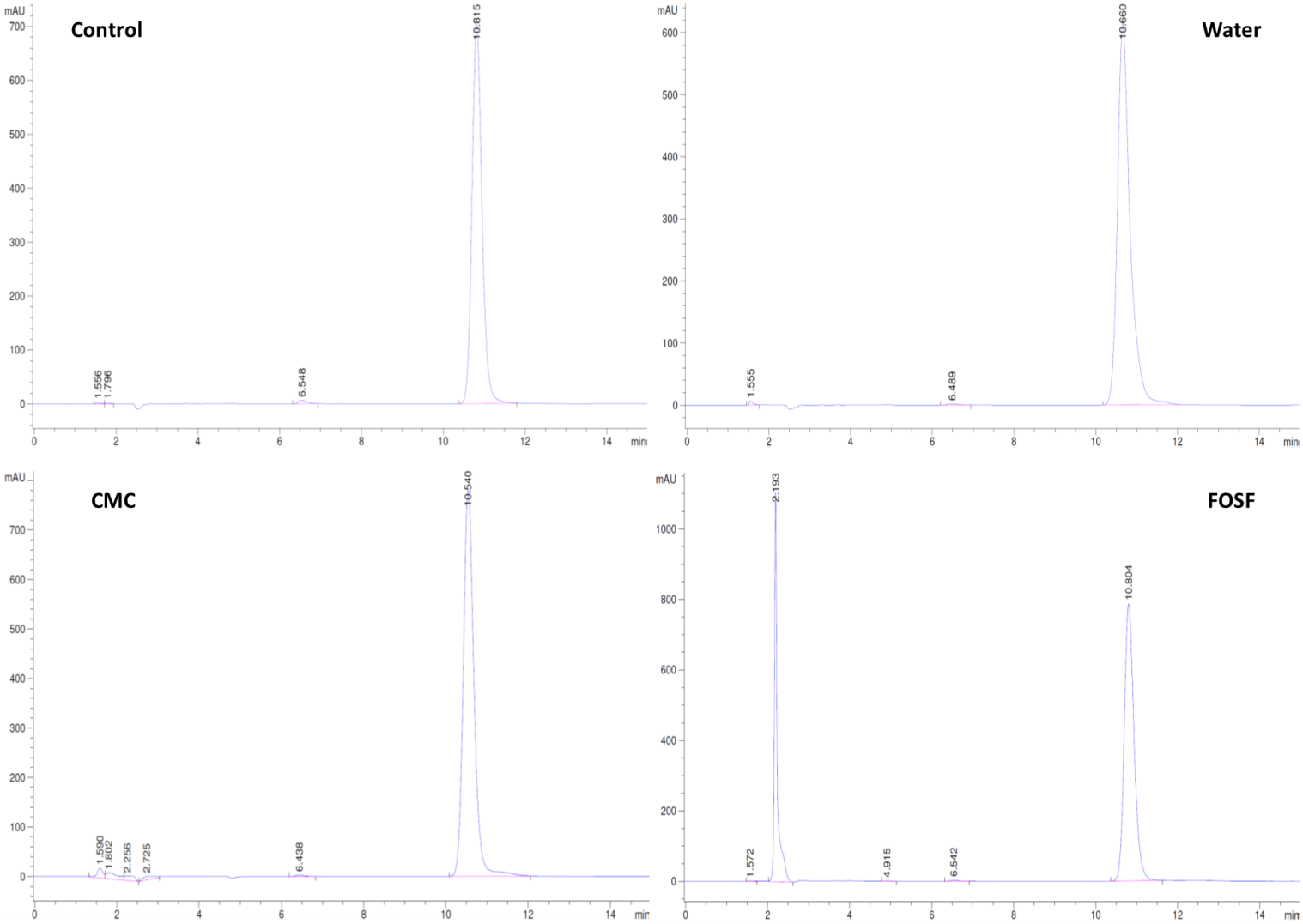

Figure S2 Chromatograms of hydroxychloroquine and drug-loaded suspension without filtrations or centrifugation.

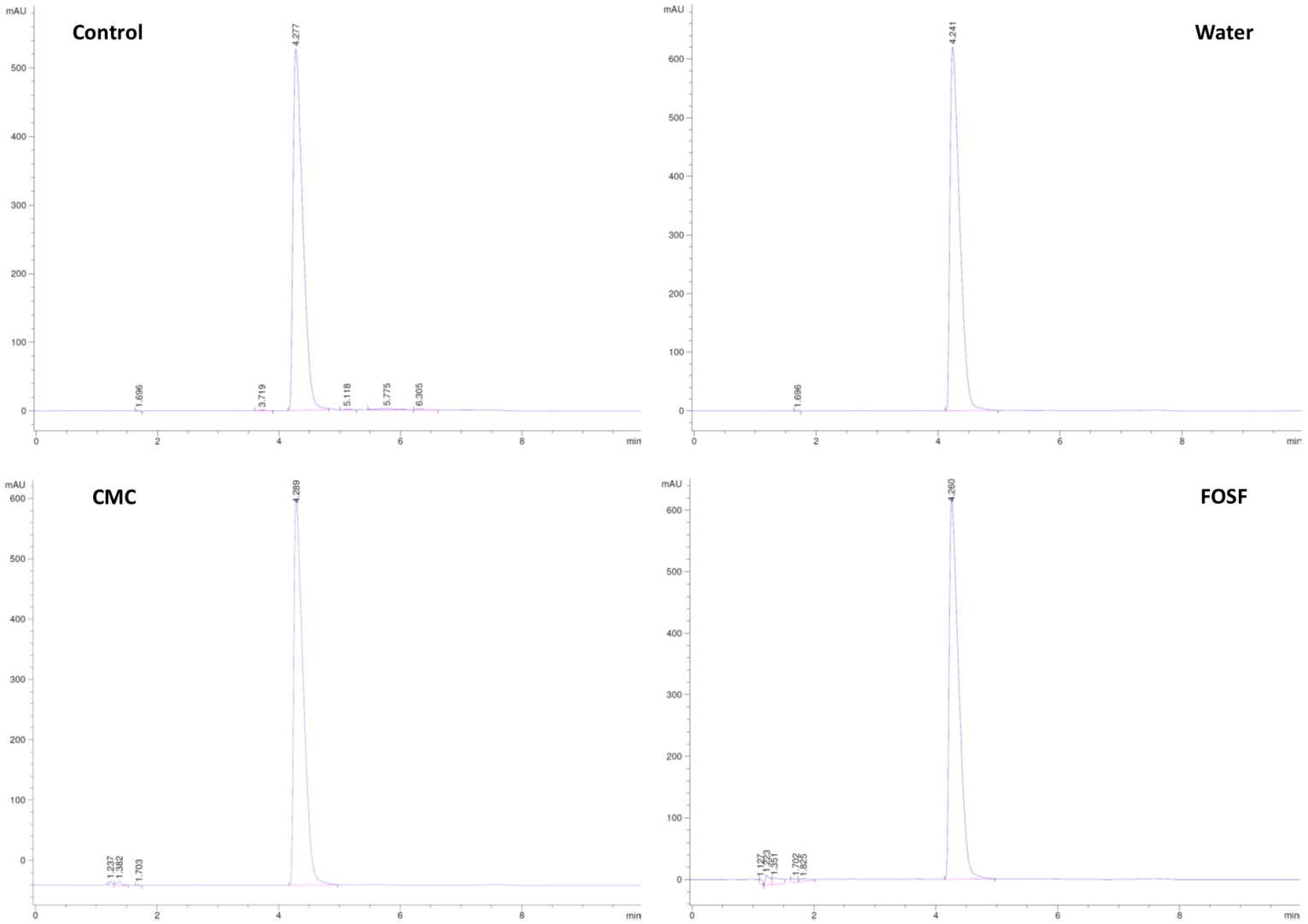

Table S1 Raw data of analytical analyses of filtered/centrifuged suspension containing chloroquine

Conc.	Vehicle	Filter/centrifugation	Dil.	RT	Peak area	Conc. (mg/mL)	Assay (%)
4 mg/mL	Control	-	1:4	10.597	12698.3	4.192	102.3
		-	1:4	10.603	12681.3	4.186	102.1
		-	1:4	10.885	12068.2	3.982	99.1
		0.2 µm, NYL	1:4	10.597	12662.9	4.180	102.0
		0.2 µm, NYL	1:4	10.581	13591.5	4.488	109.5
		0.2 µm, NYL	1:4	10.878	12320.6	4.066	101.1
		0.2 µm, PES	1:4	10.568	12360.9	4.080	99.5
		0.2 µm, PES	1:4	10.554	12758.3	4.212	102.7
		0.2 µm, PES	1:4	10.836	12399.9	4.093	101.8
		0.45 µm, PP	1:4	10.536	12522.3	4.133	100.8
		0.45 µm, PP	1:4	10.531	12700.2	4.192	102.3
		0.45 µm, PP	1:4	10.725	12235.0	4.038	100.4
		0.45 µm, PTFE	1:4	10.538	12773.4	4.217	102.9
		0.45 µm, PTFE	1:4	10.521	12862.6	4.246	103.6
		0.45 µm, PTFE	1:4	10.660	11930.1	3.937	97.9
	Water	-	1:4	10.540	12379.0	4.086	102.8
		-	1:4	10.580	12355.7	4.078	102.6
		-	1:4	10.734	12171.1	4.017	98.5
		0.2 µm, NYL	1:4	10.607	12239.2	4.039	101.6
		0.2 µm, NYL	1:4	10.659	11968.9	3.949	99.4
		0.2 µm, NYL	1:4	10.775	12198.1	4.0255	98.8
		0.2 µm, PES	1:4	10.626	12385.0	4.088	102.8
		0.2 µm, PES	1:4	10.630	11910.7	3.930	98.9
		0.2 µm, PES	1:4	10.778	12301.3	4.060	99.6
		0.45 µm, PP	1:4	10.695	12122.1	4.000	100.6
		0.45 µm, PP	1:4	10.755	11973.3	3.951	99.4
		0.45 µm, PP	1:4	10.773	12359.1	4.079	100.1
		0.45 µm, PTFE	1:4	10.765	12139.6	4.006	100.8
		0.45 µm, PTFE	1:4	10.760	12026.7	3.969	99.9
		0.45 µm, PTFE	1:4	10.788	12265.3	4.048	99.3
	CMC	-	1:4	10.774	14187.9	4.686	116.4
		-	1:4	10.766	12685.5	4.187	104.0
		-	1:4	10.816	12750.9	4.209	103.5
		0.2 µm, NYL	1:4	10.727	12484.8	4.121	102.4
		0.2 µm, NYL	1:4	10.685	12385.5	4.088	101.5
		0.2 µm, NYL	1:4	10.804	12743.2	4.207	103.4
		0.2 µm, PES	1:4	10.719	12763.7	4.213	104.7
		0.2 µm, PES	1:4	10.718	12909.6	4.262	105.9
		0.2 µm, PES	1:4	10.802	12626.6	4.168	102.5
		0.45 µm, PP	1:4	10.689	12837.9	4.238	105.3
		0.45 µm, PP	1:4	10.705	12499.7	4.126	102.5
		0.45 µm, PP	1:4	10.800	12994.1	4.290	105.5
		0.45 µm, PTFE	1:4	10.670	12835.1	4.237	105.3

		0.45 µm, PTFE	1:4	10.705	12510.7	4.129	102.6
		0.45 µm, PTFE	1:4	10.871	12635.0	4.171	102.5
	FOSP	-	1:4	10.689	11722.5	3.868	95.4
		-	1:4	10.702	12224.8	4.034	99.5
		-	1:4	10.864	12154.1	4.011	98.3
		0.2 µm, NYL	1:4	10.710	13191.8	4.356	107.4
		0.2 µm, NYL	1:4	10.705	12621.9	4.166	102.7
		0.2 µm, NYL	1:4	10.698	13112.0	4.329	106.1
		0.2 µm, PES	1:4	10.798	12757.0	4.211	103.8
		0.2 µm, PES	1:4	10.758	12161.3	4.013	98.9
		0.2 µm, PES	1:4	10.764	12188.9	4.022	98.6
		0.45 µm, PP	1:4	10.773	12767.9	4.215	103.9
		0.45 µm, PP	1:4	10.818	11827.7	3.903	96.2
		0.45 µm, PP	1:4	10.804	12241.1	4.040	99.0
		0.45 µm, PTFE	1:4	10.827	12068.3	3.982	98.2
		0.45 µm, PTFE	1:4	10.837	12601.6	4.160	102.5
		0.45 µm, PTFE	1:4	10.790	12055.7	3.978	97.5
25mg/mL	Control	-	1:25	10.798	11944.3	24.633	97.0
		-	1:25	10.758	14379.5	29.687	116.9
		-	1:25	10.862	11665.3	24.0537	95.7
		0.2 µm, NYL	1:25	10.773	11466.9	23.642	93.1
		0.2 µm, NYL	1:25	10.818	12677.4	26.154	103.0
		0.2 µm, NYL	1:25	10.764	12296.3	25.3634	100.9
		0.2 µm, PES	1:25	10.827	12401.8	25.582	100.7
		0.2 µm, PES	1:25	10.837	12760.3	26.326	103.7
		0.2 µm, PES	1:25	10.825	11902.7	24.5465	97.7
		0.45 µm, PP	1:25	10.845	12438.3	25.658	101.0
		0.45 µm, PP	1:25	10.850	12348.4	25.471	100.3
		0.45 µm, PP	1:25	10.790	12080.0	24.914	99.2
		0.45 µm, PTFE	1:25	10.863	12308.1	25.388	100.0
		0.45 µm, PTFE	1:25	10.878	12353.0	25.481	100.3
		0.45 µm, PTFE	1:25	10.809	12022.2	24.794	98.7
	Water	-	1:25	10.869	14454.7	29.843	117.9
		-	1:25	10.883	12820.3	26.451	104.5
		-	1:25	10.802	12154.8	25.0696	98.4
		0.2 µm, NYL	1:25	10.875	12246.6	25.260	99.8
		0.2 µm, NYL	1:25	10.880	12880.1	26.575	105.0
		0.2 µm, NYL	1:25	10.795	12189.9	25.1425	98.7
		0.2 µm, PES	1:25	10.890	13006.2	26.837	106.0
		0.2 µm, PES	1:25	10.888	12349.3	25.473	100.6
		0.2 µm, PES	1:25	10.804	12319.8	25.412	99.8
		0.45 µm, PP	1:25	10.874	12151.9	25.064	99.0
		0.45 µm, PP	1:25	10.895	12717.0	26.237	103.6
		0.45 µm, PP	1:25	10.871	12339.4	25.453	99.9
		0.45 µm, PTFE	1:25	10.908	12158.5	25.077	99.1
		0.45 µm, PTFE	1:25	10.915	12187.9	25.138	99.3
		0.45 µm, PTFE	1:25	10.757	12296.6	25.3641	99.6
		After centrifugation	1:25	10.913	13200.2	27.2394	107.6

		After centrifugation	1:25	10.920	12167.4	25.0957	98.5
		After centrifugation	1:25	10.925	12203.2	25.170	99.4
	CMC	-	1:25	10.939	14364.2	29.655	117.0
		-	1:25	10.954	14512.6	29.963	118.2
		-	1:25	10.777	13132.4	27.099	106.6
		0.2 µm, NYL	1:25	10.922	12877.9	26.570	104.9
		0.2 µm, NYL	1:25	10.928	12680.5	26.161	103.2
		0.2 µm, NYL	1:25	10.564	12700.6	26.2024	103.1
		0.2 µm, PES	1:25	10.692	12146.2	25.052	98.9
		0.2 µm, PES	1:25	10.780	12685.8	26.172	103.3
		0.2 µm, PES	1:25	10.731	12212.4	25.1892	99.1
		0.45 µm, PP	1:25	10.815	12454.9	25.693	101.4
		0.45 µm, PP	1:25	10.821	13071.3	26.972	106.4
		0.45 µm, PP	1:25	10.702	13389.7	27.633	108.7
		0.45 µm, PTFE	1:25	10.837	13098.7	27.029	106.7
		0.45 µm, PTFE	1:25	10.828	12552.1	25.894	102.2
		0.45 µm, PTFE	1:25	10.827	12193.1	25.149	98.9
		After centrifugation	1:25	10.839	12752.0	26.309	103.8
		After centrifugation	1:25	10.831	12111.9	24.981	98.3
		After centrifugation	1:25	10.825	12760.9	26.328	103.9
	FOSP	-	1:25	10.830	12081.8	24.918	97.8
		-	1:25	10.828	13772.0	28.426	111.6
		-	1:25	10.827	12583.3	25.959	101.8
		0.2 µm, NYL	1:25	10.782	12103.0	24.962	98.0
		0.2 µm, NYL	1:25	10.765	12633.2	26.063	102.3
		0.2 µm, NYL	1:25	10.88	13528.9	27.922	109.5
		0.2 µm, PES	1:25	10.758	12291.2	25.353	99.5
		0.2 µm, PES	1:25	10.796	12273.4	25.316	99.4
		0.2 µm, PES	1:25	10.921	11731.9	24.192	94.9
		0.45 µm, PP	1:25	10.842	12383.5	25.544	100.3
		0.45 µm, PP	1:25	10.856	12369.7	25.516	100.2
		0.45 µm, PP	1:25	10.939	11934.3	24.612	96.5
		0.45 µm, PTFE	1:25	10.876	12816.4	26.443	103.8
		0.45 µm, PTFE	1:25	10.826	12883.8	26.583	104.4
		0.45 µm, PTFE	1:25	10.692	12220.0	25.205	98.8
		After centrifugation	1:25	10.837	13243.8	27.330	107.3
		After centrifugation	1:25	10.835	11385.9	23.474	99.5
		After centrifugation	1:25	10.842	12820.0	26.450	103.8

Table S2 Raw data of analytical analyses of filtered suspension containing hydroxychloroquine

Conc.	Vehicle	Filter/centrifugation	Dil.	RT	Peak area	Conc. (mg/mL)	Assay (%)
4 mg/mL	Control	-	1:4	4.277	6819.2	4.030	100.7
		-	1:4	4.278	6507.5	3.843	96.0
		-	1:4	4.256	7101.2	4.199	102.2
		0.2 µm, NYL	1:4	4.238	7014.4	4.147	103.6
		0.2 µm, NYL	1:4	4.221	7077.5	4.184	104.5
		0.2 µm, NYL	1:4	4.288	6887.0	4.070	99.1
		0.2 µm, PES	1:4	4.212	7157.6	4.232	105.7
		0.2 µm, PES	1:4	4.220	7177.0	4.244	106.0
		0.2 µm, PES	1:4	4.268	6972.2	4.121	100.4
		0.45 µm, PP	1:4	4.211	6940.3	4.102	102.5
		0.45 µm, PP	1:4	4.225	6901.8	4.079	101.9
		0.45 µm, PP	1:4	4.283	6947.6	4.107	100.0
		0.45 µm, PTFE	1:4	4.225	7242.6	4.283	107.0
		0.45 µm, PTFE	1:4	4.213	7284.2	4.308	107.6
		0.45 µm, PTFE	1:4	4.283	7192.5	4.253	103.6
	Water	-	1:4	4.241	6813.8	4.027	101.3
		-	1:4	4.250	7180.1	4.246	106.8
		-	1:4	4.242	7136.2	4.220	106.3
		0.2 µm, NYL	1:4	4.236	6913.4	4.086	102.8
		0.2 µm, NYL	1:4	4.251	6632.4	3.918	98.6
		0.2 µm, NYL	1:4	4.275	6908.9	4.084	102.8
		0.2 µm, PES	1:4	4.242	6979.0	4.125	103.8
		0.2 µm, PES	1:4	4.257	6587.4	3.891	97.9
		0.2 µm, PES	1:4	4.265	7027.5	4.155	104.6
		0.45 µm, PP	1:4	4.242	6656.6	3.933	99.0
		0.45 µm, PP	1:4	4.257	6753.0	3.990	100.4
		0.45 µm, PP	1:4	4.252	7020.6	4.150	104.5
		0.45 µm, PTFE	1:4	4.241	6719.0	3.970	99.9
		0.45 µm, PTFE	1:4	4.242	6664.7	3.937	99.1
		0.45 µm, PTFE	1:4	4.263	7009.1	4.143	104.3
	CMC	-	1:4	4.258	6212.4	3.667	92.3
		-	1:4	4.231	7172.2	4.241	106.8
		-	1:4	4.289	6886.7	4.070	102.3
		0.2 µm, NYL	1:4	4.240	6939.3	4.102	103.3
		0.2 µm, NYL	1:4	4.241	6961.9	4.115	103.6
		0.2 µm, NYL	1:4	4.296	7108.3	4.203	105.6
		0.2 µm, PES	1:4	4.231	7030.9	4.157	104.7
		0.2 µm, PES	1:4	4.230	6859.5	4.054	102.1
		0.2 µm, PES	1:4	4.315	6914.0	4.087	102.7
		0.45 µm, PP	1:4	4.236	6678.3	3.946	99.4
		0.45 µm, PP	1:4	4.248	6675.2	3.944	99.3
		0.45 µm, PP	1:4	4.287	7096.0	4.195	105.4

		0.45 µm, PTFE	1:4	4.230	6665.1	3.938	99.2
		0.45 µm, PTFE	1:4	4.236	6790.4	4.013	101.1
		0.45 µm, PTFE	1:4	4.349	7030.2	4.156	104.4
	FOSP	-	1:4	4.248	6802.9	4.020	100.4
		-	1:4	4.230	6774.3	4.003	100.0
		-	1:4	4.260	6696.3	3.956	99.4
		0.2 µm, NYL	1:4	4.257	6526.3	3.855	96.3
		0.2 µm, NYL	1:4	4.250	6504.9	3.842	95.9
		0.2 µm, NYL	1:4	4.282	6816.2	4.028	101.2
		0.2 µm, PES	1:4	4.276	6839.5	4.042	100.9
		0.2 µm, PES	1:4	4.236	6902.9	4.080	101.9
		0.2 µm, PES	1:4	4.265	7057.3	4.172	104.8
		0.45 µm, PP	1:4	4.254	6484.6	3.830	95.6
		0.45 µm, PP	1:4	4.232	6957.2	4.112	102.7
		0.45 µm, PP	1:4	4.280	6746.3	3.986	100.1
		0.45 µm, PTFE	1:4	4.250	6816.3	4.028	100.6
		0.45 µm, PTFE	1:4	4.229	6731.2	3.977	99.3
		0.45 µm, PTFE	1:4	4.263	6074.6	3.584	90.0
25mg/mL	Control	-	1:25	4.173	7807.7	24.323	102.7
		-	1:25	4.190	7585.5	23.623	99.7
		-	1:25	4.258	7471.1	23.263	90.6
		0.2 µm, NYL	1:25	4.185	7637.6	23.787	100.4
		0.2 µm, NYL	1:25	4.190	7496.2	23.342	98.5
		0.2 µm, NYL	1:25	4.280	7560.6	23.545	91.7
		0.2 µm, PES	1:25	4.193	7358.8	22.909	96.7
		0.2 µm, PES	1:25	4.187	7608.2	23.695	100.0
		0.2 µm, PES	1:25	4.291	7352.2	22.888	89.2
		0.45 µm, PP	1:25	4.171	7636.5	23.784	100.4
		0.45 µm, PP	1:25	4.173	7614.3	23.714	100.1
		0.45 µm, PP	1:25	4.256	7485.7	23.309	90.8
		0.45 µm, PTFE	1:25	4.173	7556.5	23.532	99.3
		0.45 µm, PTFE	1:25	4.147	7762.9	24.182	102.1
		0.45 µm, PTFE	1:25	4.332	7196.1	22.397	87.3
	Water	-	1:25	4.259	8313.3	25.916	103.5
		-	1:25	4.249	8376.6	26.115	104.3
		-	1:25	4.172	10225.9	31.940	128.7
		0.2 µm, NYL	1:25	4.273	7950.2	24.772	99.0
		0.2 µm, NYL	1:25	4.262	8271.7	25.785	103.0
		0.2 µm, NYL	1:25	4.259	7356.8	22.903	92.3
		0.2 µm, PES	1:25	4.268	7811.8	24.336	97.2
		0.2 µm, PES	1:25	4.271	8228.3	25.648	102.5
		0.2 µm, PES	1:25	4.210	7842.5	24.433	98.4
		0.45 µm, PP	1:25	4.268	8105.5	25.261	100.9
		0.45 µm, PP	1:25	4.261	8375.4	26.111	104.3
		0.45 µm, PP	1:25	4.261	7212.6	22.449	90.5
		0.45 µm, PTFE	1:25	4.267	8136.3	25.358	101.3

		0.45 µm, PTFE	1:25	4.259	7827.5	24.386	97.4
		0.45 µm, PTFE	1:25	4.253	6970.2	21.685	87.4
		After centrifugation	1:25	4.250	8205.6	25.577	102.2
		After centrifugation	1:25	4.258	8540.4	26.631	106.4
		After centrifugation	1:25	4.342	7962.9	24.812	100.0
	CMC	-	1:25	4.264	8087.4	25.204	101.1
		-	1:25	4.237	9119.2	28.454	114.2
		-	1:25	4.270	6901.8	21.470	86.3
		0.2 µm, NYL	1:25	4.235	8471.0	26.413	106.0
		0.2 µm, NYL	1:25	4.257	8607.5	26.843	107.7
		0.2 µm, NYL	1:25	4.297	7248.4	22.562	90.7
		0.2 µm, PES	1:25	4.249	8383.0	26.135	104.9
		0.2 µm, PES	1:25	4.237	8433.9	26.296	105.5
		0.2 µm, PES	1:25	4.325	7707.1	24.006	96.5
		0.45 µm, PP	1:25	4.242	8304.9	25.889	103.9
		0.45 µm, PP	1:25	4.246	8292.1	25.849	103.7
		0.45 µm, PP	1:25	4.282	7171.5	22.319	89.7
		0.45 µm, PTFE	1:25	4.244	8239.8	25.684	103.0
		0.45 µm, PTFE	1:25	4.262	7919.3	24.675	99.0
		0.45 µm, PTFE	1:25	4.34	7405.5	23.056	92.7
		After centrifugation	1:25	4.241	8324.9	25.952	104.1
		After centrifugation	1:25	4.292	7482.5	23.299	93.7
		After centrifugation	1:25	4.249	7845.7	24.443	98.1
	FOSP	-	1:25	4.257	7909.0	24.642	98.3
		-	1:25	4.241	7996.9	24.919	99.4
		-	1:25	4.245	7323.0	22.797	91.6
		0.2 µm, NYL	1:25	4.266	7885.1	24.567	98.0
		0.2 µm, NYL	1:25	4.269	7914.1	24.658	98.3
		0.2 µm, NYL	1:25	4.249	6939.3	21.588	86.8
		0.2 µm, PES	1:25	4.252	8009.8	24.960	99.5
		0.2 µm, PES	1:25	4.270	7991.6	24.903	99.3
		0.2 µm, PES	1:25	4.272	7159.6	22.282	89.6
		0.45 µm, PP	1:25	4.247	7879.4	24.549	97.9
		0.45 µm, PP	1:25	4.250	7800.5	24.301	96.9
		0.45 µm, PP	1:25	4.273	7626.8	23.753	95.5
		0.45 µm, PTFE	1:25	4.240	7792.7	24.276	96.8
		0.45 µm, PTFE	1:25	4.258	8009.8	24.960	99.5
		0.45 µm, PTFE	1:25	4.212	9045.9	28.223	113.4
		After centrifugation	1:25	4.245	7897.4	24.606	98.1
		After centrifugation	1:25	4.234	8265.7	25.766	102.7
		After centrifugation	1:25	4.303	7610.6	23.703	95.3