Supporting Information

Engineering of the TnT Wheat Germ Expression System to Provide Compatibility with a High Throughput pET-based Cloning Platform

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Table S1: Expression and solubility characteristics of 59 human proteins, produced intracellularly in *Escherichia coli* and in the cell-free expression system TNT® SP6 High-Yield Wheat Germ Cell-Free (Promega).

		***E. coli* Expression**			**WGCF Expression**		
NESG Target ID	**MW (kDa)**	**E (1-5)**	**S (1-5)**	**ES product**	**E (1-5)**	**S (1-5)**	**ES product**
HR2886	38.09	5	2	10	4	4	16
HR2887	36.99	0	0	0	5	5	25
HR2889	23.79	5	2	10	4	3	12
HR2891	12.57	4	3	12	4	3	12
HR2894A	12.9	0	0	0	4	2	8
HR2894B	13.3	0	0	0	3	2	6
HR2894C	13.9	0	0	0	0	0	0
HR2895B-1-59	8.5	0	0	0	0	0	0
HR2895B-1-63	8.9	0	0	0	0	0	0
HR2902A-239-350	14.4	0	0	0	4	3	12
HR2902A-239-356	15.1	0	0	0	5	3	15
HR2902A-245-350	13.8	0	0	0	5	3	15
HR2902A-245-356	14.4	0	0	0	1	3	3
HR2909A-110-211	13.3	0	0	0	5	2	10
HR2909A-110-218	14.1	0	0	0	5	2	10
HR2909A-115-218	13.6	0	0	0	5	2	10
HR2909B-212-312	13.2	0	0	0	2	2	4
HR2909B-216-312	12.8	0	0	0	2	2	4
HR2909C-1-110	14.1	4	0	0	5	2	10
HR2909C-1-115	14.7	3	0	0	5	2	10
HR2909C-14-110	12.8	5	0	0	4	3	12
HR2909C-14-115	13.3	0	0	0	4	3	12
HR2909C-7-110	13.6	5	0	0	2	3	6
HR2924	37.76	5	0	0	4	5	20
HR2928	32.15	0	0	0	5	4	20
HR2930	21.26	0	0	0	5	4	20
HR2934	22.91	0	0	0	5	4	20
HR2951	29.73	0	0	0	5	5	25
HR2965	34.46	5	1	5	5	5	25
HR3007	30.83	5	4	20	5	4	20
HR3023A	13.7	0	0	0	0	0	0
HR3047	21.59	0	0	0	5	5	25
HR3051	34.68	4	5	20	5	5	25
HR3057	14.66	5	5	25	4	3	12
HR3068A	14.2	5	0	0	2	2	4
HR3082A-32-125	12.5	0	0	0	0	0	0
HR3111	15.1	0	0	0	4	3	12
HR3123A	13.1	0	0	0	5	3	15
HR3123C	12.6	2	4	8	4	2	8
HR3123E	12	0	0	0	4	2	8
HR3123F	16.2	0	0	0	2	2	4
HR3141A	11.7	0	0	0	1	5	5
HR3141C	10.6	0	0	0	1	4	4

HR3445C	15.1	5	0	0	5	2	10
HR3461D	13.7	5	5	25	5	3	15
HR3597B	13.1	2	4	8	3	3	9
HR3646E	14.2	4	4	16	3	5	15
HR4443A	12.2	5	0	0	1	5	5
HR4635B	10.9	0	0	0	5	1	5
HR5272B	16	0	0	0	0	0	0
HR5513A	13.2	4	5	20	5	5	25
HR5521A	12.8	0	0	0	3	2	6
HR5523A	13.1	0	0	0	5	2	10
HR5526A	14	3	2	6	5	2	10
HR5527A	14.9	0	0	0	3	3	9
HR5528A	14.4	4	4	16	4	2	8
HR5529A	14.8	5	5	25	5	1	5
HR5537A	15.8	4	5	20	4	4	16
HT97 (Human Ubiquitin)	10.22	5	5	25	5	5	25