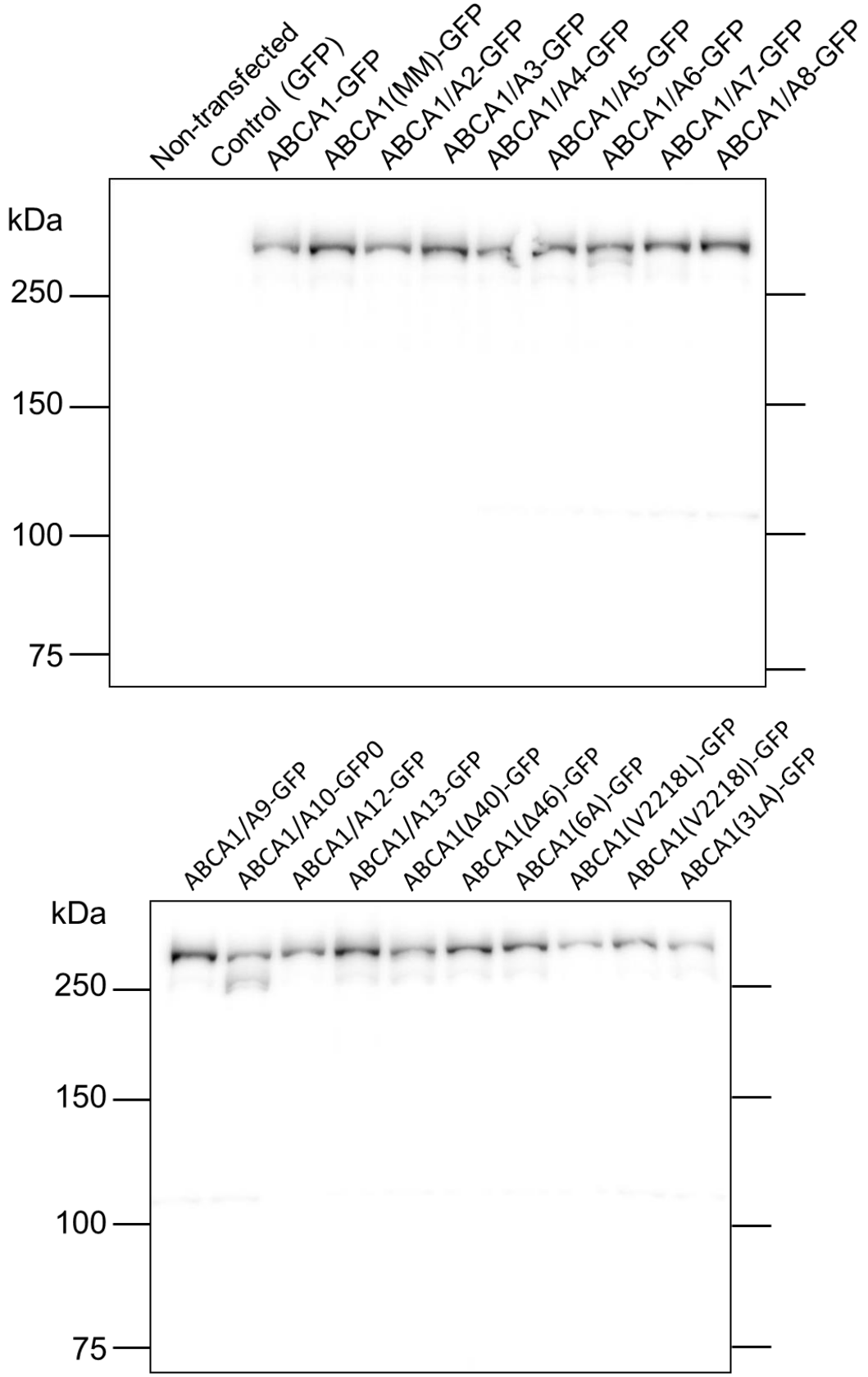
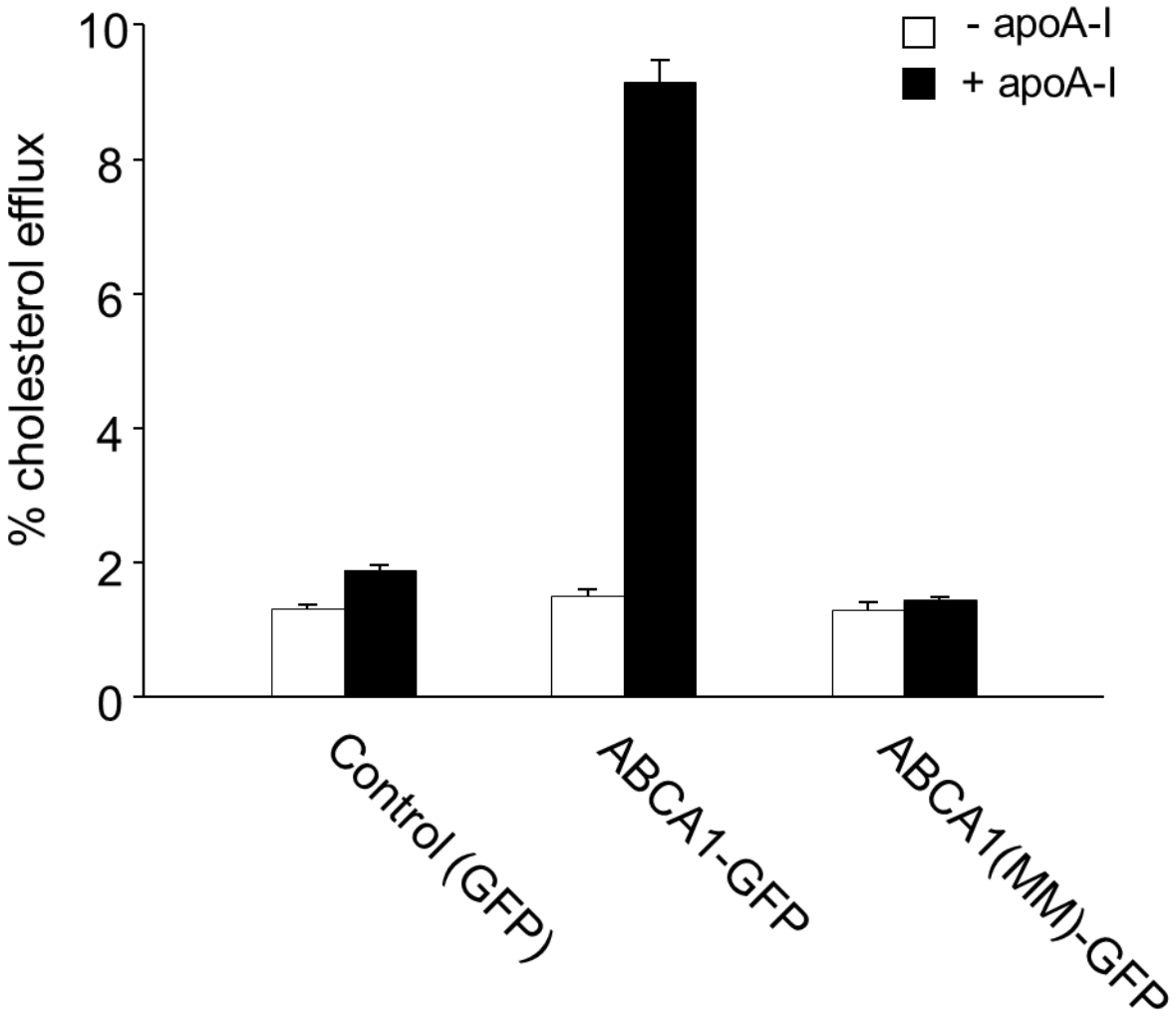
		Primer (5'→3')
L2187A	Forward	TCTTCATTATCTTCTGCCGCCAGGATATTCAGC
	Reverse	GCTGAATATCCTGGCGGCAGAAGATAATGAAGA
L2194A	Forward	GATATTCAGCATCGCCTCCCAGAGCAAAA
	Reverse	TTTTGCTCTGGGAGGCGATGCTGAATATC
L2201A	Forward	GAGCAAAAAGCGAGCCCACATAGAAGACT
	Reverse	AGTCTTCTATGTGGGCTCGCTTTTTGCTC
ABCA1 ΔC-ter	Forward	TCTAGAGGATCCCCGGGATC
	Reverse	CAGGTCCGGGTTGGACC
ABCA2 C-ter	Forward	TCCAACCCGGACCTGGTGAAGGACGTGGTGCG
	Reverse	CGGGGATCCTCTAGAGCAGAGCGTGTCCGTGT
ABCA3 C-ter	Forward	TCCAACCCGGACCTGGCGCTGGAGGAGTTCAAG
	Reverse	CGGGGATCCTCTAGATCGCCCCTCCTCTGC
ABCA4 C-ter	Forward	TCCAACCCGGACCTGCTTCCTGACCTGAACCCTGTG
	Reverse	CGGGGATCCTCTAGAGTCCTGGGCTTGTCGACTG
ABCA5 C-ter	Forward	TCCAACCCGGACCTGGAAGTAGACCGCCTTCAAAG
	Reverse	CGGGGATCCTCTAGAAAATACTACTCTATCTTCTTGTGTTCG
ABCA6 C-ter	Forward	TCCAACCCGGACCTGGTGACTTTGGTCCACACTGAGA
	Reverse	CGGGGATCCTCTAGAAGGTTCATCTGAATGAGGGAGG
ABCA7 C-ter	Forward	TCCAACCCGGACCTGCAGCCGGCAGCGG
	Reverse	CGGGGATCCTCTAGAGAGCACAGTCTCGGCAGTG
ABCA8 C-ter	Forward	TCCAACCCGGACCTGGTGGAGCCCCTCCATGC
	Reverse	CGGGGATCCTCTAGAAGGCTCTTCCTGGGGGA
ABCA9 C-ter	Forward	TCCAACCCGGACCTGATGGAGCCCCTCCATGC
	Reverse	CGGGGATCCTCTAGAAGGCTCTTCCTGCAGGAGG
ABCA10 C-ter	Forward	TCCAACCCGGACCTGGTGGAAGCTCTCCACACAGAG
	Reverse	CGGGGATCCTCTAGAAGGGTCTTCCTGTGGGAGAA
ABCA12 C-ter	Forward	TCCAACCCGGACCTGGAGACCCTCACAAAGTTCATGC
	Reverse	CGGGGATCCTCTAGAAGACTCCATCTGGTCATCTTGTG
ABCA13 C-ter	Forward	TCCAACCCGGACCTGTGCACTGTTTCTGACCACTTG
	Reverse	CGGGGATCCTCTAGAGATGGGCAAGTGATGTGTGT
ABCA1(6A)	Forward	GCAGCAGCTGCTGCAGCCAAGGACCAAAGTGATGA
	Reverse	TGCAGCAGCTGCTGCTTGGTCAAGTGTTGTCTGAG
ABCA1(Δ40),(Δ46)	Forward	TCTAGAGGATCCCCGGCGGA
ABCA1(Δ40)	Reverse	CGGGGATCCTCTAGAGGCAAAGTTCACAAATACTTGG
ABCA1(Δ46)	Reverse	CGGGGATCCTCTAGATTGGTCAAGTGTTGTCTGAG

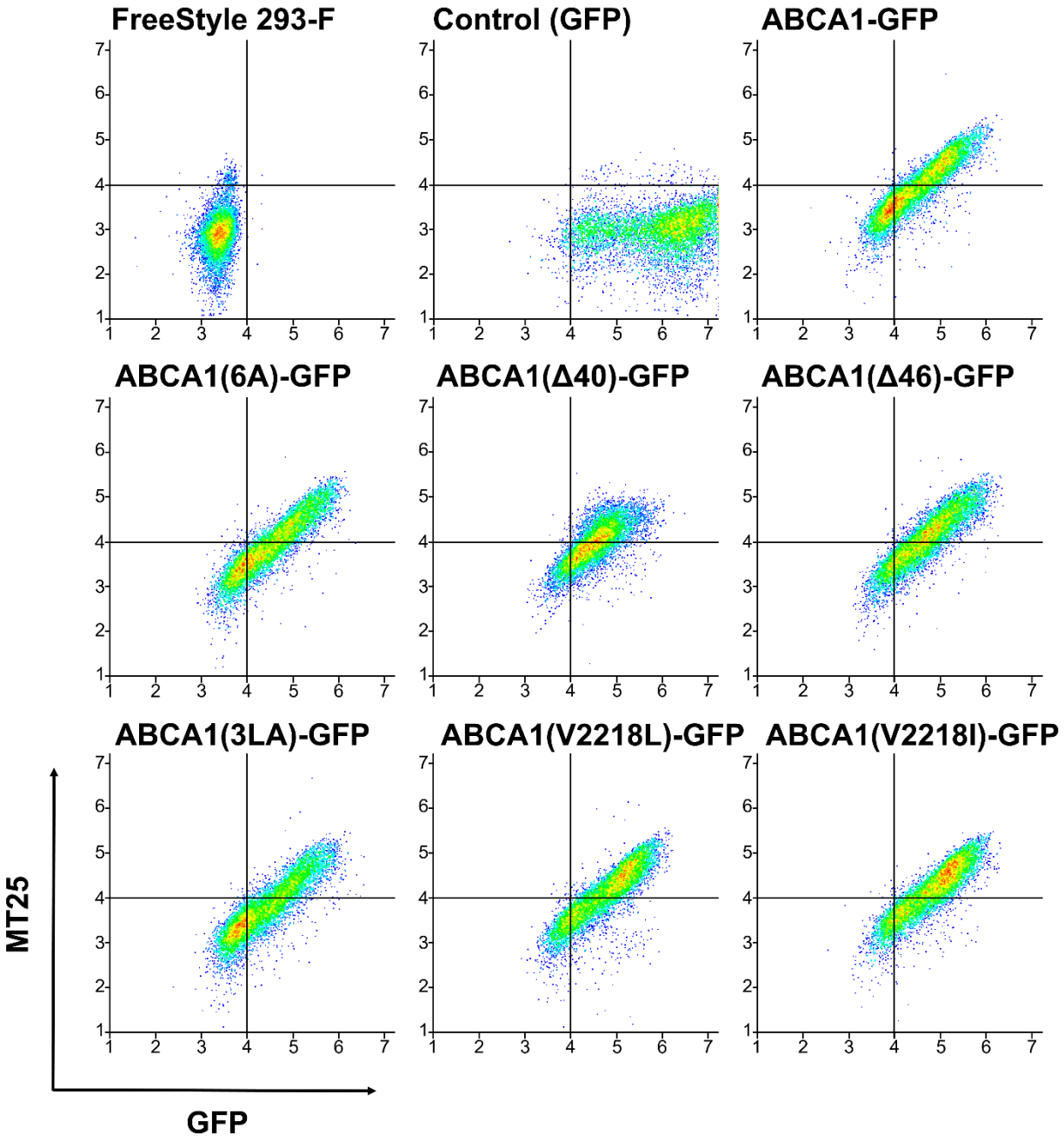
Supplementary Table 1. **List of primers used for plasmid construction.**



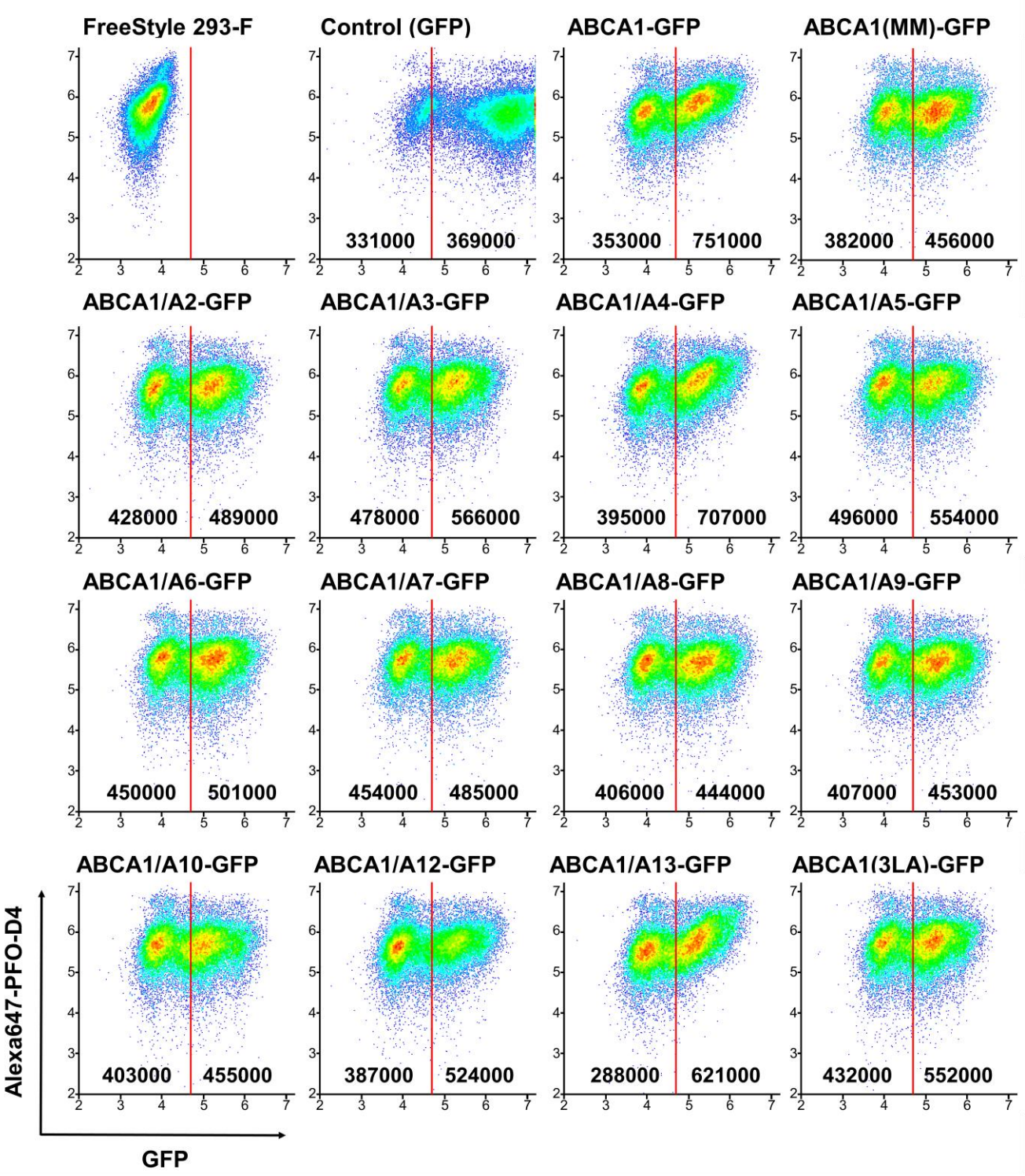
Supplementary Figure 1. **Western blot analysis of chimeras and mutants of ABCA1.** HEK293 cells transiently expressing chimeras or mutants of ABCA1 were lysed with 1% TritonX-100/PBS supplemented with protease inhibitor. The lysates were analyzed by Western blotting using MT25 antibody.



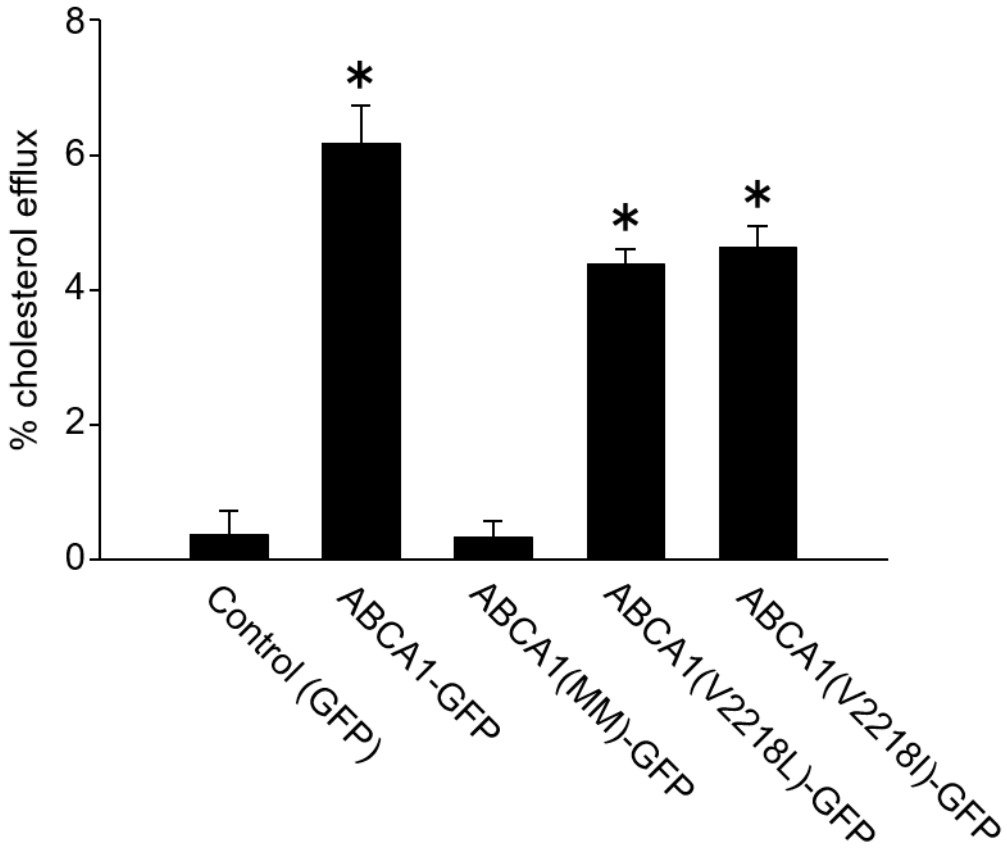
Supplementary Figure 2. **Cholesterol efflux activity of ABCA1 in the presence or absence of apoA-I.** The percentage of cholesterol efflux in the presence or absence of apoA-I was measured as described in the legend of Figure 3 and indicated in filled bars and empty bars, respectively. Experiments were performed in triplicate, and mean values are shown ± SE.



Supplementary Figure 3. **Plasma membrane localization of ABCA1 mutants.** Plasma membrane localization of ABCA1 mutants were analyzed by flow cytometry using MT25 antibody as described in the legend of Figure 2.



Supplementary Figure 4. **Alexa 647-labeled PFO-D4 binding to FreeStyle 293-F cells.** Alexa 647-labeled PFO-D4 binding to FreeStyle 293-F cells was analyzed by flow cytometry. Both axes are displayed in logarithmic scale. Warmer colors indicate higher density of counts. FreeStyle 293-F cells with fluorescence intensities greater than 50,000 a.u. were defined as GFP-positive, and the others as GFP-negative. The median value of the Alexa647 fluorescence intensity of each population is shown.



Supplementary Figure 5. **ApoA-I–dependent cholesterol efflux activity of ABCA1(V2218L) and ABCA1(V2218I).** The percentage of cholesterol efflux from HEK293 cells expressing ABCA1(V2218L)-GFP and ABCA1(V2218I)-GFP was measured as described in the legend of Figure 3. Experiments were performed in triplicate, and mean values are shown ± SE. *P < 0.01 compared with control.