

A A β 38 (% of total A β)

	DMSO					50 nM RO7019009					250 nM RO7019009					500 nM RO7019009				
WT	9.8	11.4	12.6	4.8	4.3	30.5	42.9	35.3	37	33.6	65.1	67.3	70.2	70.5	53.7	93.2	79.1	78.7	82.6	77.8
M292D	7.4	29.8	8.8	2.1	2.1	32.5	24	27	22.5	20.3	47.8	51.8	61.2	59.2	54.4	74.4	66.6	74.1	72.7	67.5
V261F	15	n.d.	n.d.	1.2	1	33.5	34	25.1	16	18.1	60.7	54	41.1	47.4	43.6	68	55.7	51.7	63.8	60.4
R278I	n.d.	n.d.	n.d.	1.1	0.2	22.2	19.7	18.4	22.1	20.5	47.5	48	44.2	53.1	53.9	58.7	63.1	59.9	68.2	66.4
L435F	7.3	9.4	10.1	3.9	3.9	32.7	36	39	44	44.4	67	73.1	68.5	67.2	77.7	74.9	83.2	77.7	82.6	84.2
L166P	5.1	n.d.	n.d.	0.9	1	14.1	19.9	17.7	20.2	18.9	33.6	42.7	38.6	41.1	33.3	62.1	51.8	51.9	48.5	47.4
Y256S	20.4	18	16.1	1.5	15.3	78.4	78.7	80.1	74.5	77.6	88.8	91.4	91.2	88.7	89.2	89.6	92	94.1	92.4	93.1
G382A	29.6	23.6	23.2	12.2	12.2	90.2	85.3	84.8	85.7	88	95.7	95	94.6	94.3	94.4	93.4	98.1	95.1	94.3	95.3

B A β 43 (% of total A β)

	DMSO					50 nM RO7019009					250 nM RO7019009					500 nM RO7019009				
WT	n.d.	0.5	0.5	0	0.2	n.d.	0.9	0.9	0	0.3	n.d.	1.2	1	n.d.	0.3	n.d.	0.9	1	n.d.	0.2
M292D	2.2	1.9	2.5	3.6	4.1	4.2	2	2.2	2.4	3	n.d.	2.3	1.5	1.3	1.7	n.d.	2.7	0.9	0.8	0.6
V261F	47.7	59.1	57.1	68.3	69.2	49.7	44.3	49.3	66.2	64.4	29.8	36.5	41	41.9	46.2	25.4	33.7	33.6	28.5	32.8
R278I	60.9	68.3	68.8	68.5	71	46.8	57.8	56.5	55.3	59.9	34.6	34.5	33.6	30.3	31.4	20.5	20.6	22.3	17.8	20.4
L435F	18.6	21.6	17.9	23.3	32	21.5	19.3	19.2	21.4	25.1	13.1	9.5	12.2	18.9	11.9	8.9	5.2	11.7	7.3	8.5
L166P	19	30.1	32.9	26.6	35.5	17.3	23.6	23.3	20	22.1	10	14.2	13	10.9	14.7	6.5	9.6	7.5	6.6	8.8
Y256S	16.5	21.4	19.2	21.1	19.6	7.6	8	5.9	6.6	6.9	4.3	3.5	2.6	2.2	3.4	3.7	2.7	n.d.	0.8	1.9
G382A	15.7	11.2	11.8	10.6	11.6	2.9	2.5	2.1	1.8	1.9	1.6	1.1	0.7	0.4	0.7	1.6	1.5	n.d.	0.2	0.5

C A β 42 (% of total A β)

	DMSO					50 nM RO7019009					250 nM RO7019009					500 nM RO7019009				
WT	4.9	4.2	3.3	6.4	3.7	3	2.6	2.1	2.6	1.8	2.5	1.6	1.7	1	1	n.d.	1.2	1.2	0.6	0.5
M292D	6.8	2.6	4.8	8.1	6	6.4	2.5	4.7	3.4	3.1	3.2	2.1	1.7	2.1	1.7	3.9	1.9	1.3	2.2	1.5
V261F	5.1	4.6	7.3	5.6	5.5	4.5	2.7	5.4	5.5	5.8	4.5	3.3	4.7	5.2	4.8	4	2.8	5.3	4.3	3.6
R278I	13.5	9.4	12	10.9	9.1	12.5	9.3	11.6	10.1	7.3	14.1	8	10.8	8.5	7.7	10.6	6.4	9.2	7	6.5
L435F	5.3	4.3	4	4.5	3.6	3.9	1.9	2.6	2.3	1.8	3.2	1.1	2	1.3	1	2.8	n.d.	1.6	0.8	1
L166P	27.7	25.9	31.6	32.6	24.5	32.5	26.3	31.9	34.1	29.3	28.7	25.8	30.8	28.8	31.7	23	23.3	26.6	28.4	26.7
Y256S	23.5	22.3	25.6	29.5	21.5	6.3	5.5	6.5	7.7	5.2	4.6	2.6	3.3	4.3	3.8	4.3	2.2	4	2.8	2.7
G382A	8.7	3.3	4.4	4.4	3.4	1.6	0.6	1.2	0.6	0.5	1	0.5	0.8	0.2	0.2	1.2	0.4	1.4	0.4	0.2

Source Data Figure 4