

Table S1. Anti-drug antibody production in cynomolgus monkeys in the 4-week repeat-dose toxicity study.

Dose	3 mg/kg		10 mg/kg		30 mg/kg		
	Male/Female	Male	Female	Male	Female	Male	Female
Number of animals (positive/total)							
Anti-pabinafusp alfa antibody		3/3	3/3	3/3	2/3	4/5	3/5
Nab (TfR)		3/3	3/3	3/3	2/3	4/5	3/5
Nab (M6PR)		3/3	2/3	2/3	2/3	4/5	3/5

Anti-drug antibody analysis was performed on day 28 of dosing period.

Nab (TfR), TfR-binding inhibitory antibody; Nab (M6PR), M6PR-binding inhibitory antibody.

Table S2. Anti-drug antibody production in juvenile cynomolgus monkeys in the 4-week repeat-dose toxicity study.

Dose	3 mg/kg	10 mg/kg	30 mg/kg
Number of animals (positive/total)			
Anti-pabinafusp alfa antibody	3/3	3/3	3/4
Nab (TfR)	3/3	3/3	3/4
Nab (M6PR)	3/3	2/3	2/4

Anti-drug antibody analysis was performed on day 28 of dosing period.

Nab (TfR), TfR-binding inhibitory antibody; Nab (M6PR), M6PR-binding inhibitory antibody.

Table S3. Anti-drug antibody production in cynomolgus monkeys in the 26-week repeat-dose toxicity study.

Dose	3 mg/kg		10 mg/kg		30 mg/kg	
	Male	Female	Male	Female	Male	Female
Male/Female						
Number of animals (positive/total)						
Anti-pabinafusp alfa antibody	4/4	3/4	4/4	4/4	6/6	4/6
Day 84 Nab (TfR)	4/4	3/4	4/4	3/4	6/6	4/6
Nab (M6PR)	3/4	3/4	4/4	3/4	5/6	4/6
Anti-pabinafusp alfa antibody	4/4	3/4	4/4	3/4	4/6	5/6
Day 182 Nab (TfR)	4/4	3/4	4/4	2/4	4/6	5/6
Nab (M6PR)	3/4	3/4	4/4	2/4	4/6	5/6

Nab (TfR), TfR-binding inhibitory antibody; Nab (M6PR), M6PR-binding inhibitory antibody.

Table S4. Tissue radioactivity concentration in cynomolgus monkeys given a single intravenous dose of ^{125}I -labeled pabinafusp alfa.

Organ/Tissue	Radioactivity concentration ($\mu\text{g eq./mL or g}$)									
	Male					Female				
	2h	8h	24h	48h	72h	2h	8h	24h	48h	72h
Blood	6.32	1.78	0.673	0.158	0.0587	6.37	2.54	1.14	0.433	0.216
Brain	0.202	0.147	0.0521	< 0.02	< 0.02	0.278	0.182	0.108	< 0.02	< 0.02
Spinal cord	0.377	0.253	0.0604	0.0256	< 0.02	0.743	0.257	0.134	0.0553	0.0276
Pituitary gland	0.526	0.445	0.0774	0.0362	0.0360	1.65	0.537	0.237	0.0726	< 0.02
Eyeball	0.0994	0.202	0.0528	< 0.02	< 0.02	0.0802	0.148	0.0986	0.0390	< 0.02
Submandibular gland	0.496	0.514	0.158	0.0423	< 0.02	0.827	0.834	0.247	0.130	0.0331
Thyroid gland	> 10	> 10	> 10	> 10	> 10	> 10	> 10	> 10	> 10	> 10
Thymus	1.17	1.23	0.206	0.0405	0.0606	1.13	0.691	1.27	0.345	no sample
Heart	1.07	0.974	0.162	0.0467	< 0.02	1.35	0.632	0.145	0.195	0.103
Lung	4.96	2.25	0.648	0.102	0.0301	5.08	1.35	0.436	0.227	0.0978
Liver	5.48	2.72	0.472	0.132	0.0479	6.76	2.16	1.08	0.339	0.309
Kidney	2.82	1.47	0.886	0.0722	0.0236	3.04	1.86	0.808	0.145	0.167
Adrenal gland	2.87	2.06	0.340	0.0962	0.0248	3.35	1.33	0.238	0.276	0.0681
Spleen	4.81	2.01	1.92	0.214	0.0914	5.15	2.59	1.23	0.243	0.293
Pancreas	0.874	1.27	0.612	0.0266	< 0.02	1.22	0.540	0.384	0.0778	0.0690
Epididymis	0.843	0.918	0.255	0.0706	0.0341	-	-	-	-	-
Testis	0.554	0.587	0.177	0.0435	0.0202	-	-	-	-	-
Uterus	-	-	-	-	-	0.941	0.768	0.666	0.224	0.119
Ovary	-	-	-	-	-	0.608	0.637	0.296	0.0969	0.0637
Skin	0.768	1.05	0.740	0.0399	< 0.02	1.53	1.34	0.650	0.278	0.130
Skeletal muscles	0.202	0.127	0.150	< 0.02	< 0.02	0.270	0.166	0.202	0.0236	0.0236
Bone	0.543	0.707	0.156	0.0400	0.0229	0.862	0.593	0.650	0.145	0.0718
Bone marrow	11.6	5.39	1.12	0.602	0.322	14.3	7.70	2.11	1.17	0.617

Data are from one animal for each time point.

Table S5. Hematological parameters of cynomolgus monkeys in the 4-week repeat-dose toxicity study.

		Control				Pabinafusp alfa, 3 mg/kg			Pabinafusp alfa, 10 mg/kg			Pabinafusp alfa, 30 mg/kg			
Male		Pre (n = 5)	Day 22 (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)	Pre (n = 3)	Day 22 (n = 3)	Day 27 (n = 3)	Pre (n = 3)	Day 22 (n = 3)	Day 27 (n = 3)	Pre (n = 5)	Day 22 (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)
RBC	(10 ⁶ /µL)	5.622 ± 0.277	5.648 ± 0.272	5.684 ± 0.410	5.905	4.973 ± 0.456*	4.903 ± 0.329*	5.040 ± 0.399	5.297 ± 0.230	5.570 ± 0.387	5.423 ± 0.131	5.546 ± 0.290	5.418 ± 0.334	5.382 ± 0.326	6.440
Hb	(g/dL)	14.04 ± 0.44	14.06 ± 0.96	14.08 ± 1.34	14.35	13.43 ± 1.08	13.00 ± 0.87	13.23 ± 0.90	13.00 ± 0.40	13.33 ± 0.78	12.87 ± 0.21	13.46 ± 0.50	12.84 ± 0.56	12.48 ± 0.39	14.85
Ht	(%)	43.42 ± 1.43	44.20 ± 3.26	45.58 ± 3.86	44.90	41.00 ± 2.34	40.83 ± 2.18	42.37 ± 3.15	39.97 ± 0.45*	42.50 ± 2.44	41.20 ± 1.91	41.58 ± 0.81	40.58 ± 1.80	40.26 ± 0.51*	47.40
MCV	(fL)	77.38 ± 4.34	78.22 ± 3.91	80.22 ± 4.58	76.05	82.70 ± 3.10	83.37 ± 2.40	84.13 ± 2.98	75.53 ± 4.10	76.37 ± 3.12	76.07 ± 3.98	75.16 ± 4.76	75.08 ± 4.03	75.00 ± 3.90	73.70
MCH	(pg)	25.02 ± 1.10	24.94 ± 1.12	24.78 ± 1.22	24.30	27.10 ± 0.40*	26.57 ± 0.12	26.30 ± 0.35	24.57 ± 0.40	23.93 ± 0.25	23.77 ± 0.21	24.30 ± 1.38	23.70 ± 1.09	23.22 ± 1.04	23.10
MCHC	(g/dL)	32.36 ± 0.53	31.86 ± 0.28	30.88 ± 0.83	31.95	32.80 ± 0.75	31.87 ± 0.91	31.30 ± 0.95	32.57 ± 1.30	31.37 ± 1.18	31.33 ± 1.55	32.34 ± 1.04	31.62 ± 0.68	30.94 ± 0.61	31.35
Ret	(%)	1.04 ± 0.32	0.94 ± 0.32	1.48 ± 0.94	0.90	0.73 ± 0.25	0.83 ± 0.15	1.13 ± 0.06	0.97 ± 0.23	0.93 ± 0.15	1.57 ± 0.50	0.84 ± 0.21	0.70 ± 0.19	1.24 ± 0.55	1.10
Plat	(10 ³ /µL)	372.6 ± 98.3	434.4 ± 103.2	458.2 ± 117.6	513.5	329.3 ± 134.5	335.3 ± 45.9	358.7 ± 76.1	377.7 ± 93.2	419.3 ± 100.3	433.3 ± 100.7	326.2 ± 52.4	348.4 ± 76.8	407.0 ± 57.6	396.0
WBC	(10 ³ /µL)	9.212 ± 2.497	10.486 ± 2.548	10.400 ± 1.119	9.410	8.667 ± 1.340	6.107 ± 1.471*	8.457 ± 1.206	11.270 ± 0.505	9.963 ± 1.277	13.930 ± 1.421	9.738 ± 1.649	7.112 ± 2.464	11.926 ± 4.014	10.140
Neutro	(10 ³ /µL)	4.082 ± 1.412	5.052 ± 0.968	4.758 ± 1.082	4.405	5.463 ± 1.064	3.527 ± 1.124	5.113 ± 0.634	3.650 ± 0.145	3.697 ± 1.291	4.500 ± 2.084	4.480 ± 1.376	3.398 ± 1.905	5.570 ± 3.327	4.440
Lymph	(10 ³ /µL)	4.562 ± 1.889	4.854 ± 1.555	5.084 ± 1.375	4.530	2.720 ± 0.426	2.270 ± 0.331	2.957 ± 0.563	7.003 ± 0.500	5.750 ± 0.092	8.733 ± 1.353**	4.634 ± 1.435	3.324 ± 1.328	5.756 ± 1.691	4.955
Mono	(10 ³ /µL)	0.352 ± 0.085	0.330 ± 0.087	0.308 ± 0.063	0.295	0.350 ± 0.104	0.177 ± 0.023*	0.283 ± 0.021	0.430 ± 0.082	0.200 ± 0.026	0.360 ± 0.036	0.426 ± 0.200	0.134 ± 0.086**	0.298 ± 0.129	0.430
Eosino	(10 ³ /µL)	0.146 ± 0.086	0.166 ± 0.146	0.144 ± 0.116	0.110	0.090 ± 0.010	0.090 ± 0.056	0.057 ± 0.035	0.110 ± 0.035	0.150 ± 0.046	0.183 ± 0.058	0.124 ± 0.042	0.164 ± 0.192	0.166 ± 0.096	0.210
Baso	(10 ³ /µL)	0.028 ± 0.011	0.024 ± 0.005	0.038 ± 0.016	0.030	0.023 ± 0.012	0.013 ± 0.006	0.020 ± 0.000	0.030 ± 0.010	0.030 ± 0.010	0.047 ± 0.015	0.034 ± 0.015	0.018 ± 0.008	0.046 ± 0.023	0.035
LUC	(10 ³ /µL)	0.042 ± 0.023	0.052 ± 0.019	0.064 ± 0.017	0.040	0.027 ± 0.015	0.040 ± 0.030	0.027 ± 0.025	0.043 ± 0.023	0.130 ± 0.030**	0.103 ± 0.006	0.044 ± 0.018	0.076 ± 0.030	0.092 ± 0.071	0.065

		Control				Pabinafusp alfa, 3 mg/kg			Pabinafusp alfa, 10 mg/kg			Pabinafusp alfa, 30 mg/kg			
Female		Pre (n = 5)	Day 22 (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)	Pre (n = 3)	Day 22 (n = 3)	Day 27 (n = 3)	Pre (n = 3)	Day 22 (n = 3)	Day 27 (n = 3)	Pre (n = 5)	Day 22 (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)
RBC	(10 ⁶ /µL)	5.236 ± 0.398	5.362 ± 0.293	5.406 ± 0.225	5.925	5.190 ± 0.121	5.123 ± 0.214	5.187 ± 0.164	5.330 ± 0.078	5.260 ± 0.191	5.353 ± 0.225	5.328 ± 0.184	5.164 ± 0.219	5.182 ± 0.174	5.680
Hb	(g/dL)	12.64 ± 1.01	12.88 ± 0.82	13.02 ± 0.65	14.05	12.63 ± 0.40	12.30 ± 0.44	12.40 ± 0.36	13.10 ± 0.60	12.63 ± 0.78	12.87 ± 0.55	12.82 ± 0.46	12.02 ± 0.78	12.20 ± 0.76	13.50
Ht	(%)	39.56 ± 2.56	42.68 ± 1.56	42.20 ± 0.87	45.10	38.87 ± 0.67	40.73 ± 1.53	40.27 ± 1.63	41.40 ± 0.66	41.77 ± 0.90	41.67 ± 0.85	40.52 ± 1.48	40.38 ± 2.74	39.48 ± 2.01*	43.65
MCV	(fL)	75.60 ± 2.11	79.64 ± 3.01	78.10 ± 2.33	76.20	74.87 ± 0.55	79.47 ± 0.51	77.57 ± 0.83	77.63 ± 2.36	79.50 ± 2.72	77.97 ± 2.61	76.08 ± 2.66	78.10 ± 2.50	76.20 ± 2.32	76.85
MCH	(pg)	24.14 ± 0.40	24.02 ± 0.52	24.12 ± 0.62	23.70	24.30 ± 0.26	23.97 ± 0.15	23.90 ± 0.10	24.67 ± 1.52	24.03 ± 1.53	24.03 ± 1.46	24.04 ± 0.69	23.34 ± 0.70	23.54 ± 0.72	23.75
MCHC	(g/dL)	31.94 ± 0.95	30.16 ± 1.18	30.86 ± 1.25	31.10	32.47 ± 0.47	30.17 ± 0.06	30.80 ± 0.46	31.70 ± 1.00	30.20 ± 1.14	30.83 ± 0.91	31.58 ± 0.46	29.86 ± 0.42	30.88 ± 0.66	30.95
Ret	(%)	1.08 ± 0.65	1.46 ± 0.37	1.52 ± 0.58	0.95	0.80 ± 0.61	0.97 ± 0.06	1.57 ± 0.72	0.87 ± 0.47	1.10 ± 0.20	1.73 ± 0.23	0.78 ± 0.24	1.20 ± 0.20	2.26 ± 0.23	1.10
Plat	(10 ³ /µL)	442.2 ± 85.2	515.4 ± 111.1	510.0 ± 108.9	451.0	410.3 ± 33.8	458.7 ± 10.2	485.3 ± 51.6	360.7 ± 86.0	440.3 ± 147.1	433.7 ± 122.0	393.8 ± 54.8	508.0 ± 75.1	535.0 ± 68.5	454.0
WBC	(10 ³ /µL)	8.298 ± 2.002	9.940 ± 0.793	8.756 ± 1.616	5.740	12.430 ± 0.984*	11.623 ± 1.106	11.383 ± 0.427	7.727 ± 1.631	7.173 ± 2.757	7.960 ± 3.140	10.934 ± 2.253	8.018 ± 1.783	12.426 ± 4.178	12.030
Neutro	(10 ³ /µL)	4.120 ± 1.790	4.176 ± 0.897	4.480 ± 1.274	2										

Table S6. Blood chemistry of cynomolgus monkeys in the 4-week repeat-dose toxicity study.

Male		Control			Pabinafusp alfa, 3 mg/kg		Pabinafusp alfa, 10 mg/kg		Pabinafusp alfa, 30 mg/kg		
		Pre (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)	Pre (n = 3)	Day 27 (n = 3)	Pre (n = 3)	Day 27 (n = 3)	Pre (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)
AST	(IU/L)	57.2 ± 25.1	45.6 ± 38.1	28.5	44.7 ± 8.1	54.7 ± 52.7	46.7 ± 17.2	26.0 ± 10.0	55.6 ± 39.8	26.4 ± 5.9	25.0
ALT	(IU/L)	50.6 ± 14.4	141.2 ± 235.3	35.5	42.7 ± 10.4	117.3 ± 156.5	40.3 ± 18.9	24.3 ± 7.2*	61.6 ± 16.2	37.6 ± 5.8	32.5
ALP	(IU/L)	703.4 ± 421.4	648.6 ± 304.9	586.5	600.7 ± 572.9	488.3 ± 272.6	924.3 ± 570.2	857.7 ± 562.0	746.2 ± 504.4	678.0 ± 343.6	386.0
CK	(IU/L)	1054.6 ± 1587.7	211.2 ± 127.5	129.0	657.7 ± 584.0	303.7 ± 143.5	1128.0 ± 1596.2	158.0 ± 57.9	415.6 ± 338.7	212.4 ± 121.5	150.5
T-Bil	(mg/dL)	0.218 ± 0.093	0.090 ± 0.021	0.125	0.113 ± 0.023	0.097 ± 0.012	0.123 ± 0.040	0.120 ± 0.053	0.138 ± 0.043	0.134 ± 0.043	0.105
TP	(g/dL)	7.50 ± 0.25	7.62 ± 0.24	7.65	7.47 ± 0.40	7.77 ± 0.40	7.33 ± 0.06	7.73 ± 0.15	7.28 ± 0.52	7.80 ± 0.66	8.00
Albumin	(g/dL)	4.08 ± 0.28	4.10 ± 0.29	4.30	4.20 ± 0.20	4.10 ± 0.10	4.17 ± 0.06	4.20 ± 0.17	3.98 ± 0.13	3.86 ± 0.09	4.20
Globulin	(g/dL)	3.42 ± 0.26	3.52 ± 0.25	3.35	3.27 ± 0.21	3.67 ± 0.45	3.17 ± 0.12	3.53 ± 0.06	3.30 ± 0.42	3.94 ± 0.64	3.80
A/G	(ratio)	1.202 ± 0.154	1.172 ± 0.150	1.285	1.287 ± 0.025	1.130 ± 0.161	1.313 ± 0.064	1.190 ± 0.062	1.220 ± 0.145	1.002 ± 0.172	1.105
TG	(mg/dL)	28.4 ± 14.7	33.0 ± 9.5	40.0	33.7 ± 17.1	33.0 ± 15.9	59.7 ± 34.2	42.0 ± 7.0	31.2 ± 12.2	34.8 ± 15.2	48.5
T-cho	(mg/dL)	114.8 ± 22.9	121.2 ± 23.7	109.0	117.3 ± 7.5	129.0 ± 24.6	106.3 ± 26.4	111.7 ± 20.8	109.6 ± 28.0	118.0 ± 23.8	100.5
Glucose	(mg/dL)	72.0 ± 13.6	75.4 ± 11.1	79.0	72.0 ± 19.1	73.7 ± 6.0	71.0 ± 11.3	84.3 ± 9.1	77.0 ± 8.6	74.8 ± 6.7	71.0
UN	(mg/dL)	24.58 ± 6.49	21.66 ± 5.16	19.70	21.23 ± 3.87	21.47 ± 3.76	27.33 ± 3.42	24.27 ± 2.87	21.96 ± 3.19	22.04 ± 3.91	20.50
Cre	(mg/dL)	0.910 ± 0.146	0.884 ± 0.189	0.865	0.890 ± 0.174	0.943 ± 0.219	0.923 ± 0.114	0.970 ± 0.141	0.952 ± 0.227	0.984 ± 0.216	1.225
IP	(mg/dL)	5.474 ± 0.819	4.626 ± 0.700	4.515	4.267 ± 0.879	4.643 ± 1.391	4.830 ± 1.000	4.983 ± 0.676	4.696 ± 0.443	4.132 ± 0.551	3.715
Ca	(mg/dL)	9.98 ± 0.54	10.24 ± 0.50	9.95	9.83 ± 0.40	9.83 ± 0.21	9.77 ± 0.47	9.97 ± 0.25	9.56 ± 0.21	9.64 ± 0.31	10.35
Na	(mEq/L)	146.6 ± 5.0	150.0 ± 1.6	145.5	147.7 ± 3.1	149.3 ± 2.9	147.0 ± 3.0	148.3 ± 4.2	147.6 ± 2.4	147.4 ± 2.2	150.0
K	(mEq/L)	4.82 ± 0.77	4.92 ± 0.37	4.15	4.70 ± 0.46	4.63 ± 0.35	5.07 ± 0.15	4.63 ± 0.38	4.36 ± 0.38	4.22 ± 0.41*	4.80
Cl	(mEq/L)	104.8 ± 8.5	109.4 ± 3.9	107.5	108.3 ± 1.2	109.0 ± 1.0	109.3 ± 1.2	110.3 ± 2.9	108.4 ± 2.6	109.0 ± 2.5	109.5
Fe	(µg/dL)	147.34 ± 31.75	156.58 ± 22.73	183.00	156.93 ± 11.40	154.00 ± 22.00	168.57 ± 17.69	147.87 ± 5.41	142.14 ± 43.49	124.10 ± 37.61	141.75
UIBC	(µg/dL)	232.12 ± 42.97	241.02 ± 41.37	174.90	207.63 ± 78.85	236.23 ± 51.76	205.10 ± 14.08	247.83 ± 35.11	224.24 ± 26.46	259.50 ± 16.84	220.00
FER	(ng/mL)	12.36 ± 7.67	20.48 ± 21.62	9.20	5.23 ± 4.60	29.80 ± 13.74	13.87 ± 4.06	11.47 ± 3.27	9.42 ± 3.80	11.46 ± 1.88	3.25
Hp	(mg/dL)	72.62 ± 22.08	88.40 ± 30.98	47.70	59.90 ± 41.24	53.80 ± 17.72	63.83 ± 29.91	46.00 ± 28.24	75.40 ± 38.24	68.44 ± 42.11	56.00
TIBC	(µg/dL)	379.46 ± 30.61	397.60 ± 24.67	357.90	364.57 ± 86.61	390.23 ± 73.05	373.67 ± 29.27	395.70 ± 31.00	366.38 ± 29.40	383.60 ± 25.08	361.75
Female		Control			Pabinafusp alfa, 3 mg/kg		Pabinafusp alfa, 10 mg/kg		Pabinafusp alfa, 30 mg/kg		
		Pre (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)	Pre (n = 3)	Day 27 (n = 3)	Pre (n = 3)	Day 27 (n = 3)	Pre (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)
AST	(IU/L)	50.2 ± 14.6	32.4 ± 6.4	42.0	34.0 ± 8.2	24.7 ± 2.1	36.7 ± 8.1	29.7 ± 12.9	48.2 ± 20.4	33.4 ± 10.5	34.5
ALT	(IU/L)	72.8 ± 38.7	70.8 ± 53.3	60.5	64.7 ± 14.6	54.3 ± 14.3	51.7 ± 18.6	42.3 ± 7.6	58.0 ± 13.3	46.4 ± 19.7	43.5
ALP	(IU/L)	435.0 ± 161.6	481.8 ± 137.3	427.0	566.7 ± 409.0	580.3 ± 416.3	490.3 ± 205.1	537.0 ± 204.5	489.6 ± 165.7	494.2 ± 130.1	344.5
CK	(IU/L)	1150.2 ± 1409.8	173.0 ± 60.4	515.5	378.3 ± 390.8	275.3 ± 85.6	222.0 ± 55.7	211.7 ± 92.5	560.4 ± 448.3	243.6 ± 263.0	92.5
T-Bil	(mg/dL)	0.214 ± 0.036	0.124 ± 0.027	0.180	0.180 ± 0.098	0.150 ± 0.061	0.173 ± 0.045	0.110 ± 0.010	0.192 ± 0.046	0.132 ± 0.032	0.105
TP	(g/dL)	7.38 ± 0.33	7.36 ± 0.23	7.25	7.07 ± 0.25	7.27 ± 0.32	7.53 ± 0.50	7.37 ± 0.64	7.18 ± 0.42	7.34 ± 0.29	7.15
Albumin	(g/dL)	3.96 ± 0.15	3.92 ± 0.11	3.95	3.87 ± 0.15	3.90 ± 0.17	3.97 ± 0.25	3.80 ± 0.36	3.96 ± 0.22	3.90 ± 0.19	4.10
Globulin	(g/dL)	3.42 ± 0.22	3.44 ± 0.17	3.30	3.20 ± 0.40	3.37 ± 0.42	3.57 ± 0.25	3.57 ± 0.29	3.22 ± 0.34	3.44 ± 0.29	3.05
A/G	(ratio)	1.160 ± 0.057	1.140 ± 0.052	1.200	1.227 ± 0.200	1.173 ± 0.192	1.113 ± 0.006	1.067 ± 0.032	1.242 ± 0.133	1.142 ± 0.120	1.345
TG	(mg/dL)	37.4 ± 17.9	50.4 ± 23.1	58.0	40.7 ± 18.2	38.7 ± 14.6	29.0 ± 7.8	31.0 ± 6.6	40.4 ± 12.7	50.2 ± 19.0	35.0
T-cho	(mg/dL)	124.0 ± 20.8	130.8 ± 8.0	123.5	128.0 ± 30.0	133.3 ± 23.5	137.3 ± 7.0	141.0 ± 13.5	123.0 ± 45.7	122.4 ± 29.0	103.0
Glucose	(mg/dL)	69.8 ± 2.8	76.0 ± 12.0	63.0	77.3 ± 9.5	67.7 ± 1.5	69.7 ± 3.2	72.0 ± 3.6	72.2 ± 9.5	77.0 ± 7.8	85.0
UN	(mg/dL)	19.62 ± 4.24	20.08 ± 3.83	23.10	25.87 ± 4.57	23.10 ± 4.44	17.83 ± 2.39	19.10 ± 4.10	24.00 ± 3.84	23.86 ± 2.89	24.40
Cre	(mg/dL)	0.670 ± 0.091	0.658 ± 0.104	0.690	0.720 ± 0.066	0.740 ± 0.072	0.743 ± 0.153	0.697 ± 0.134	0.724 ± 0.098	0.686 ± 0.089	0.775
IP	(mg/dL)	4.498 ± 0.898	4.424 ± 0.804	3.660	4.187 ± 0.700	4.060 ± 0.536	4.313 ± 0.415	3.883 ± 0.716	4.480 ± 0.891	4.282 ± 0.434	2.810
Ca	(mg/dL)	9.74 ± 0.44	9.82 ± 0.28	9.80	9.83 ± 0.12	9.63 ± 0.35	9.83 ± 0.49	9.57 ± 0.64	9.86 ± 0.36	9.70 ± 0.2	

Table S7. Hematological parameters of juvenile cynomolgus monkeys in the 4-week repeat-dose toxicity study.

		Control			Pabinafusp alfa, 3 mg/kg		Pabinafusp alfa, 10 mg/kg		Pabinafusp alfa, 30 mg/kg		
		Pre (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)	Pre (n = 3)	Day 27 (n = 3)	Pre (n = 3)	Day 27 (n = 3)	Pre (n = 5)	Day 27 (n = 5)	End of recovery (n = 2)
RBC	(10 ⁶ /µL)	6.172 ± 0.274	6.276 ± 0.275	5.945	6.063 ± 0.180	6.050 ± 0.108	5.960 ± 0.229	5.893 ± 0.305	6.292 ± 0.695	5.912 ± 0.619	6.065
Hb	(g/dL)	13.70 ± 0.25	14.24 ± 0.26	14.10	13.73 ± 0.65	13.77 ± 0.70	13.40 ± 1.21	13.27 ± 0.90	13.88 ± 0.49	12.80 ± 1.08*	13.90
Ht	(%)	46.90 ± 1.15	48.52 ± 2.13	47.95	48.23 ± 2.38	47.93 ± 3.17	47.10 ± 2.50	46.17 ± 2.54	49.40 ± 2.59	46.62 ± 4.40	47.90
MCV	(fL)	76.08 ± 3.90	77.48 ± 5.32	80.75	79.53 ± 2.12	79.17 ± 3.86	79.07 ± 2.77	78.40 ± 2.01	78.90 ± 4.96	79.12 ± 5.61	79.05
MCH	(pg)	22.28 ± 1.35	22.72 ± 1.27	23.75	22.70 ± 0.61	22.80 ± 0.80	22.47 ± 1.17	22.57 ± 0.84	22.20 ± 1.71	21.74 ± 1.52	22.95
MCHC	(g/dL)	29.26 ± 0.93	29.38 ± 0.79	29.45	28.53 ± 0.15	28.80 ± 0.36	28.47 ± 1.45	28.80 ± 0.40	28.14 ± 0.69	27.52 ± 0.49**	29.00
Ret	(%)	1.34 ± 0.56	1.14 ± 0.42	0.95	1.37 ± 0.25	1.13 ± 0.31	1.37 ± 0.51	1.60 ± 0.26	1.60 ± 0.30	2.76 ± 0.36**	0.65
Plat	(10 ³ /µL)	537.0 ± 124.9	513.4 ± 127.6	408.0	498.0 ± 95.5	525.0 ± 22.1	456.3 ± 20.3	507.3 ± 66.5	431.2 ± 86.7	572.8 ± 214.2	307.5
WBC	(10 ³ /µL)	13.006 ± 4.479	12.978 ± 3.882	16.410	15.653 ± 3.599	12.387 ± 1.887	14.460 ± 2.045	15.827 ± 2.257	16.682 ± 3.683	15.484 ± 2.146	15.485
Neutro	(10 ³ /µL)	2.978 ± 1.463	2.574 ± 0.796	7.175	2.860 ± 0.444	2.127 ± 0.514	2.090 ± 0.588	2.230 ± 0.763	3.080 ± 0.507	2.552 ± 0.627	2.135
Lymph	(10 ³ /µL)	9.150 ± 2.814	9.558 ± 2.864	8.480	11.467 ± 2.892	9.353 ± 1.339	11.413 ± 1.367	12.657 ± 3.002	12.318 ± 3.548	11.976 ± 2.163	12.395
Mono	(10 ³ /µL)	0.568 ± 0.258	0.586 ± 0.247	0.515	0.960 ± 0.214	0.663 ± 0.170	0.520 ± 0.202	0.557 ± 0.091	0.784 ± 0.216	0.580 ± 0.145	0.565
Eosino	(10 ³ /µL)	0.166 ± 0.081	0.122 ± 0.036	0.115	0.157 ± 0.035	0.103 ± 0.061	0.283 ± 0.295	0.183 ± 0.138	0.262 ± 0.191	0.182 ± 0.125	0.215
Baso	(10 ³ /µL)	0.068 ± 0.048	0.076 ± 0.034	0.075	0.100 ± 0.053	0.070 ± 0.017	0.087 ± 0.032	0.100 ± 0.026	0.114 ± 0.062	0.098 ± 0.024	0.090
LUC	(10 ³ /µL)	0.072 ± 0.044	0.060 ± 0.027	0.050	0.107 ± 0.040	0.063 ± 0.042	0.067 ± 0.031	0.097 ± 0.025	0.126 ± 0.057	0.100 ± 0.025	0.090

End of recovery = 26 days after the final dosing.

Data are means ± S.D. *P < 0.05, **P < 0.01 vs. control.

RBC, red blood cells; Hb, hemoglobin; Ht, hematocrit; MCV, mean corpuscular volume; MCH, mean corpuscular hemoglobin; MCHC, mean corpuscular hemoglobin concentration; Ret, reticulocytes; Plat, platelets; WBC, white blood cells; Neutro, neutrophils; Lymph, lymphocytes; Mono, monocytes; Eosino, eosinophils; Baso, basophils; LUC, large unstained cells.

Table S8. Blood chemistry of juvenile cynomolgus monkeys in the 4-week repeat-dose toxicity study.

		Control			Pabinafusp alfa, 3 mg/kg		Pabinafusp alfa, 10 mg/kg		Pabinafusp alfa, 30 mg/kg		
		Pre (n = 5)	Day 27 (n = 3)	End of recovery (n = 2)	Pre (n = 5)	Day 27 (n = 3)	Pre (n = 5)	Day 27 (n = 3)	Pre (n = 5)	Day 27 (n = 3)	End of recovery (n = 2)
AST	(IU/L)	47.2 ± 6.4	48.2 ± 5.7	52.5	39.0 ± 8.7	38.0 ± 7.0	30.0 ± 1.0*	32.3 ± 3.5*	42.2 ± 11.7	37.0 ± 8.3	33.0
ALT	(IU/L)	33.6 ± 12.1	35.0 ± 10.6	28.0	35.3 ± 15.0	38.0 ± 13.1	25.7 ± 1.2	26.3 ± 5.9	33.2 ± 7.2	36.0 ± 10.1	34.0
ALP	(IU/L)	2316.0 ± 598.7	2432.0 ± 774.5	2749.5	2857.0 ± 338.0	2488.7 ± 160.9	2613.0 ± 711.2	2073.7 ± 286.7	2709.8 ± 719.2	2383.8 ± 509.9	2295.0
CK	(IU/L)	406.8 ± 159.0	443.2 ± 271.5	1001.5	363.0 ± 253.0	387.7 ± 147.0	217.7 ± 38.6	297.3 ± 122.6	547.2 ± 615.2	333.6 ± 216.3	411.5
T-Bil	(mg/dL)	0.148 ± 0.030	0.158 ± 0.019	0.180	0.133 ± 0.045	0.137 ± 0.031	0.150 ± 0.026	0.117 ± 0.023	0.168 ± 0.019	0.146 ± 0.036	0.155
TP	(g/dL)	6.32 ± 0.37	6.28 ± 0.38	6.00	6.07 ± 0.21	6.03 ± 0.23	6.37 ± 0.42	6.30 ± 0.26	6.16 ± 0.24	6.40 ± 0.70	6.10
Albumin	(g/dL)	3.96 ± 0.21	3.96 ± 0.11	3.85	3.90 ± 0.10	3.87 ± 0.15	4.03 ± 0.21	3.97 ± 0.06	3.92 ± 0.19	3.80 ± 0.14	4.00
Globulin	(g/dL)	2.36 ± 0.19	2.32 ± 0.28	2.15	2.17 ± 0.15	2.17 ± 0.15	2.33 ± 0.21	2.33 ± 0.29	2.24 ± 0.18	2.60 ± 0.74	2.10
A/G	(ratio)	1.682 ± 0.094	1.722 ± 0.158	1.820	1.807 ± 0.124	1.790 ± 0.142	1.733 ± 0.068	1.720 ± 0.243	1.760 ± 0.178	1.540 ± 0.354	1.925
TG	(mg/dL)	60.6 ± 51.4	77.6 ± 83.1	40.5	32.3 ± 11.2	33.0 ± 3.6	53.7 ± 6.4	135.7 ± 128.5	72.8 ± 44.6	43.8 ± 14.8	32.5
T-cho	(mg/dL)	206.0 ± 92.1	192.8 ± 48.5	156.5	190.3 ± 58.6	178.0 ± 40.7	215.7 ± 69.8	206.3 ± 44.7	155.6 ± 23.2	156.8 ± 27.5	161.5
Glucose	(mg/dL)	98.6 ± 17.8	90.2 ± 13.8	89.5	119.7 ± 4.0	96.7 ± 16.4	108.7 ± 6.7	96.7 ± 17.6	120.0 ± 19.9	103.2 ± 12.8	82.5
UN	(mg/dL)	17.84 ± 4.75	19.08 ± 4.15	21.05	17.17 ± 1.06	16.03 ± 2.48	17.37 ± 3.00	16.63 ± 3.37	20.20 ± 3.55	18.02 ± 2.91	20.15
Cre	(mg/dL)	0.460 ± 0.063	0.502 ± 0.090	0.580	0.500 ± 0.121	0.483 ± 0.140	0.463 ± 0.060	0.480 ± 0.095	0.458 ± 0.067	0.480 ± 0.092	0.530
IP	(mg/dL)	7.560 ± 0.759	7.718 ± 0.855	6.725	6.517 ± 0.687	6.333 ± 0.290	6.943 ± 0.607	6.890 ± 1.110	7.352 ± 0.775	6.996 ± 0.719	6.255
Ca	(mg/dL)	10.52 ± 0.26	10.50 ± 0.43	10.10	10.20 ± 0.40	10.37 ± 0.67	10.30 ± 0.26	10.43 ± 0.21	10.24 ± 0.36	10.40 ± 0.43	10.05
Na	(mEq/L)	145.4 ± 1.5	147.2 ± 1.6	148.0	146.3 ± 1.2	148.3 ± 1.5	145.0 ± 1.0	145.7 ± 1.5	145.8 ± 2.5	147.8 ± 2.2	149.0
K	(mEq/L)	4.98 ± 0.61	5.38 ± 0.41	4.05	4.77 ± 0.32	4.73 ± 0.57	4.63 ± 0.60	5.37 ± 0.67	5.10 ± 0.48	5.20 ± 0.60	4.35
Cl	(mEq/L)	110.4 ± 2.6	110.8 ± 2.2	109.5	109.3 ± 1.5	110.3 ± 1.2	108.0 ± 1.0	109.3 ± 1.2	110.4 ± 1.1	110.6 ± 2.4	109.5
Fe	(μg/dL)	119.78 ± 25.05	125.72 ± 14.83	124.45	144.60 ± 12.40	157.63 ± 15.89	109.77 ± 23.26	118.33 ± 29.05	142.98 ± 38.01	123.64 ± 57.98	157.05
UIBC	(μg/dL)	219.94 ± 14.17	209.26 ± 17.51	164.35	184.17 ± 40.22	170.87 ± 25.36	202.80 ± 23.42	189.37 ± 21.41	188.62 ± 43.45	217.56 ± 71.59	152.70
FER	(ng/mL)	6.74 ± 5.90	13.06 ± 9.38	11.00	70.67 ± 54.40	54.23 ± 25.12	3.50 ± 3.60	15.47 ± 13.05	20.12 ± 9.59	37.62 ± 31.33	10.05
Hp	(mg/dL)	21.28 ± 21.90	15.18 ± 13.39	3.40	17.47 ± 5.73	11.87 ± 3.32	19.10 ± 14.29	14.40 ± 6.93	19.22 ± 16.70	15.80 ± 13.46	3.85
TIBC	(μg/dL)	339.72 ± 30.03	334.98 ± 28.08	288.80	328.77 ± 28.38	328.50 ± 35.02	312.57 ± 34.75	307.70 ± 50.46	331.60 ± 29.72	341.20 ± 29.75	309.75
TSAT	(%)	35.02 ± 4.76	37.46	2.47	43.20	44.40 ± 7.31	48.10 ± 3.35	35.00 ± 5.38	38.10 ± 3.26	43.18 ± 11.27	36.68 ± 16.85
											50.70

End of recovery = 26 days after the final dosing.

Data are means ± S.D. *P < 0.05 vs. control.

AST, aspartate transaminase; ALT, alanine transaminase; ALP, alkaline phosphatase; CK, creatine kinase; T-Bil, total bilirubin; TP, total protein; A/G, albumin/globulin ratio; TG, triglyceride; T-cho, total cholesterol; UN, urea nitrogen; Cre, creatinine; IP, inorganic phosphorus; UIBC, unsaturated iron binding capacity; FER, ferritin; Hp, haptoglobin; TIBC, total iron binding capacity; TSAT, transferrin saturation.

Table S9. Hematological parameters of cynomolgus monkeys in the 26-week repeat-dose toxicity study.

Male		Control				Pabinafusp alfa, 3 mg/kg			Pabinafusp alfa, 10 mg/kg			Pabinafusp alfa, 30 mg/kg			
		Pre (n = 6)	Week 13 (n = 6)	Week 26 (n = 6)	End of recovery (n = 2)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	End of recovery (n = 2)
RBC	(10 ⁶ /μL)	5.360 ± 0.165	5.118 ± 0.193	5.427 ± 0.239	5.880	5.843 ± 0.330	5.518 ± 0.246	5.910 ± 0.213**	5.663 ± 0.418	5.615 ± 0.464*	5.670 ± 0.140	5.627 ± 0.309	5.350 ± 0.219	5.755 ± 0.231*	5.975
Hb	(g/dL)	13.05 ± 0.44	12.27 ± 0.47	13.13 ± 0.44	14.10	14.10 ± 0.78	13.05 ± 0.57	14.03 ± 0.43*	13.65 ± 0.78	12.98 ± 1.05	13.30 ± 0.44	13.55 ± 0.79	12.20 ± 0.74	13.08 ± 0.61	13.90
Ht	(%)	41.68 ± 1.73	39.77 ± 1.78	42.57 ± 1.20	47.05	45.70 ± 3.01*	43.25 ± 2.12	46.30 ± 3.23*	45.23 ± 1.88	43.48 ± 2.61*	44.48 ± 1.17	44.03 ± 2.07	41.12 ± 2.23	43.92 ± 1.91	46.00
MCV	(fL)	77.80 ± 2.21	77.70 ± 1.97	78.53 ± 2.12	80.05	78.28 ± 4.25	78.38 ± 2.29	78.33 ± 3.81	80.03 ± 3.06	77.58 ± 2.44	78.48 ± 2.47	78.28 ± 2.22	76.87 ± 1.90	76.35 ± 3.06	76.95
MCH	(pg)	24.38 ± 0.61	23.97 ± 0.77	24.27 ± 0.78	24.05	24.13 ± 0.21	23.65 ± 0.13	23.73 ± 0.22	24.15 ± 1.13	23.10 ± 0.73	23.48 ± 0.93	24.12 ± 0.49	22.82 ± 0.71*	22.78 ± 0.89*	23.30
MCHC	(g/dL)	31.35 ± 1.02	30.87 ± 0.69	30.88 ± 0.58	30.05	30.88 ± 1.48	30.18 ± 0.95	30.30 ± 1.66	30.15 ± 0.70	29.78 ± 0.75	29.90 ± 0.43	30.82 ± 0.66	29.70 ± 0.41*	29.85 ± 0.47*	30.25
Ret	(%)	1.03 ± 0.31	2.02 ± 0.47	1.08 ± 0.33	1.00	1.05 ± 0.25	2.05 ± 0.54	0.98 ± 0.33	1.23 ± 0.62	2.58 ± 1.83	1.10 ± 0.35	0.95 ± 0.25	2.32 ± 0.31	1.07 ± 0.36	0.55
Plat	(10 ³ /μL)	442.0 ± 61.0	402.7 ± 83.5	360.5 ± 45.1	366.5	434.3 ± 135.9	417.3 ± 121.8	382.3 ± 104.2	380.5 ± 68.4	363.8 ± 70.8	324.3 ± 42.1	427.8 ± 92.7	438.7 ± 75.0	393.0 ± 64.4	343.5
WBC	(10 ³ /μL)	9.910 ± 1.423	10.288 ± 2.143	10.540 ± 2.573	10.060	11.015 ± 3.604	21.575 ± 20.038	12.348 ± 4.437	11.648 ± 3.221	12.053 ± 4.034	11.975 ± 2.896	10.125 ± 1.820	14.207 ± 2.533	12.752 ± 2.269	11.715
Neutro	(10 ³ /μL)	4.348 ± 1.277	3.042 ± 0.819	2.637 ± 0.965	2.810	4.690 ± 1.917	4.553 ± 1.352	4.250 ± 2.768	3.903 ± 0.715	3.215 ± 0.930	2.578 ± 0.550	4.730 ± 1.023	4.492 ± 0.947	3.785 ± 1.337	4.505
Lymph	(10 ³ /μL)	5.053 ± 1.331	6.702 ± 1.756	7.282 ± 2.011	6.720	5.860 ± 3.925	14.995 ± 16.648	7.455 ± 2.381	7.170 ± 2.513	8.210 ± 3.526	8.603 ± 2.412	5.030 ± 1.709	9.002 ± 2.572	8.373 ± 2.150	6.545
Mono	(10 ³ /μL)	0.272 ± 0.064	0.340 ± 0.122	0.397 ± 0.084	0.315	0.278 ± 0.105	0.658 ± 0.612	0.378 ± 0.122	0.258 ± 0.082	0.295 ± 0.083	0.390 ± 0.149	0.248 ± 0.097	0.415 ± 0.153	0.348 ± 0.101	0.485
Eosino	(10 ³ /μL)	0.162 ± 0.229	0.125 ± 0.055	0.130 ± 0.069	0.125	0.090 ± 0.115	0.750 ± 1.394	0.160 ± 0.160	0.160 ± 0.134	0.225 ± 0.197	0.295 ± 0.252	0.043 ± 0.012	0.157 ± 0.090	0.127 ± 0.085	0.085
Baso	(10 ³ /μL)	0.037 ± 0.012	0.030 ± 0.015	0.043 ± 0.018	0.040	0.038 ± 0.022	0.258 ± 0.416	0.058 ± 0.032	0.058 ± 0.025	0.048 ± 0.032	0.048 ± 0.021	0.032 ± 0.012	0.058 ± 0.025	0.057 ± 0.022	0.045
LUC	(10 ³ /μL)	0.040 ± 0.018	0.050 ± 0.023	0.052 ± 0.020	0.050	0.055 ± 0.017	0.368 ± 0.602	0.050 ± 0.012	0.100 ± 0.108	0.068 ± 0.052	0.063 ± 0.033	0.038 ± 0.012	0.087 ± 0.050	0.060 ± 0.018	0.050

Female		Control				Pabinafusp alfa, 3 mg/kg			Pabinafusp alfa, 10 mg/kg			Pabinafusp alfa, 30 mg/kg			
		Pre (n = 6)	Week 13 (n = 6)	Week 26 (n = 6)	End of recovery (n = 2)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	End of recovery (n = 2)
RBC	(10 ⁶ /μL)	5.522 ± 0.135	5.213 ± 0.174	5.523 ± 0.276	5.440	5.625 ± 0.303	5.380 ± 0.467	5.583 ± 0.355	5.343 ± 0.072	5.005 ± 0.172	5.283 ± 0.245	5.353 ± 0.386	4.988 ± 0.316	5.423 ± 0.278	6.020
Hb	(g/dL)	13.43 ± 0.54	12.35 ± 0.52	13.02 ± 0.59	12.95	12.98 ± 0.63	12.38 ± 0.92	12.68 ± 0.97	13.00 ± 0.37	11.73 ± 0.22	12.60 ± 0.26	12.90 ± 0.79	11.27 ± 0.31**	12.35 ± 0.27	13.40
Ht	(%)	42.57 ± 1.40	40.83 ± 1.59	42.72 ± 2.03	43.60	41.93 ± 1.71	40.95 ± 2.39	42.18 ± 2.85	41.73 ± 2.10	38.68 ± 1.71	41.38 ± 0.81	41.35 ± 2.15	38.03 ± 0.98*	40.90 ± 1.40	44.95
MCV	(fL)	77.05 ± 1.48	78.35 ± 2.01	77.35 ± 1.38	80.10	74.60 ± 1.96	76.30 ± 3.43	75.50 ± 2.18	78.10 ± 4.41	77.38 ± 3.69	78.45 ± 3.42	77.40 ± 3.01	76.38 ± 3.00	75.55 ± 3.13	74.65
MCH	(pg)	24.28 ± 0.71	23.68 ± 0.69	23.57 ± 0.84	23.85	23.08 ± 0.62	23.03 ± 1.11	22.70 ± 1.06	24.30 ± 0.84	23.45 ± 0.75	23.88 ± 0.98	24.12 ± 1.19	22.67 ± 1.20	22.80 ± 1.14	22.20
MCHC	(g/dL)	31.52 ± 0.52	30.23 ± 0.33	30.48 ± 0.66	29.75	30.93 ± 0.57	30.18 ± 0.54	30.08 ± 0.56	31.15 ± 0.93	30.33 ± 0.92	30.40 ± 0.56	31.17 ± 0.78	29.65 ± 0.69	30.18 ± 0.67	29.80
Ret	(%)	1.00 ± 0.38	1.85 ± 0.55	0.95 ± 0.38	1.05	0.98 ± 0.17	1.43 ± 0.43	1.03 ± 0.56	1.10 ± 0.18	1.88 ± 0.57	1.25 ± 0.57	1.02 ± 0.08	2.38 ± 0.50	0.82 ± 0.24	0.70
Plat	(10 ³ /μL)	476.7 ± 92.2	412.2 ± 88.4	395.7 ± 58.4	398.0	469.0 ± 42.2	416.5 ± 58.1	391.8 ± 39.9	539.8 ± 79.6	473.5 ± 84.2	448.8 ± 65.1	519.5 ± 81.1	516.2 ± 97.2	451.3 ± 65.2	483.5
WBC	(10 ³ /μL)	9.415 ± 1.874	9.913 ± 1.670	9.730 ± 2.694	9.150	8.188 ± 2.671	9.255 ± 3.713	11.008 ± 4.604	10.583 ± 3.004	14.873 ± 5.803	13.503 ± 3.842	8.647 ± 2.257	13.713 ± 8.366	10.598 ± 3.808	10.215
Neutro	(10 ³ /μL)	4.643 ± 2.235	4.667 ± 1.494	4.780 ±											

Table S10. Blood chemistry of cynomolgus monkeys in the 26-week repeat-dose toxicity study.

Male		Control				Pabinafusp alfa, 3 mg/kg			Pabinafusp alfa, 10 mg/kg			Pabinafusp alfa, 30 mg/kg			
		Pre (n = 6)	Week 13 (n = 6)	Week 26 (n = 6)	End of recovery (n = 2)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	End of recovery (n = 2)
AST (IU/L)		35.5 ± 7.1	31.8 ± 3.1	31.3 ± 3.4	25.5	38.5 ± 10.0	36.8 ± 2.2	35.5 ± 6.0	31.3 ± 4.1	31.3 ± 5.4	36.0 ± 12.2	34.8 ± 2.9	46.5 ± 23.0	36.5 ± 4.6	33.0
ALT (IU/L)		56.7 ± 29.8	47.7 ± 6.6	42.0 ± 4.8	32.5	42.0 ± 5.8	46.5 ± 19.0	41.5 ± 10.0	42.0 ± 8.6	47.5 ± 12.8	61.8 ± 29.2	43.5 ± 21.6	107.7 ± 154.0	45.2 ± 15.4	34.0
ALP (IU/L)		1599.2 ± 472.9	1619.8 ± 657.6	1804.3 ± 564.9	1772.5	1979.8 ± 293.4	2201.0 ± 309.7	2172.3 ± 473.8	1985.8 ± 474.2	1774.5 ± 324.5	1644.3 ± 322.9	1772.0 ± 316.9	1838.0 ± 420.8	1719.2 ± 422.1	1583.5
CK (IU/L)		144.7 ± 31.1	143.8 ± 31.6	140.7 ± 35.0	163.0	243.3 ± 93.5*	222.0 ± 36.5	227.5 ± 85.3	140.0 ± 49.5	153.3 ± 34.7	132.5 ± 38.5	151.3 ± 34.7	463.3 ± 731.5	215.7 ± 168.7	117.0
T-Bil (mg/dL)		0.187 ± 0.097	0.187 ± 0.090	0.142 ± 0.048	0.170	0.165 ± 0.072	0.153 ± 0.082	0.138 ± 0.056	0.135 ± 0.033	0.155 ± 0.019	0.158 ± 0.033	0.160 ± 0.061	0.133 ± 0.043	0.142 ± 0.055	0.155
TP (g/dL)		7.20 ± 0.15	6.95 ± 0.31	6.98 ± 0.32	7.10	7.50 ± 0.48	7.28 ± 0.38	7.38 ± 0.62	7.23 ± 0.19	7.05 ± 0.24	7.03 ± 0.05	7.55 ± 0.36	7.30 ± 0.32	7.53 ± 0.26*	6.95
Albumin (g/dL)		4.15 ± 0.18	3.93 ± 0.18	4.03 ± 0.19	4.05	4.38 ± 0.22	4.13 ± 0.22	4.28 ± 0.36	4.18 ± 0.15	4.00 ± 0.14	4.03 ± 0.17	4.28 ± 0.24	3.97 ± 0.20	4.15 ± 0.14	3.80
Globulin (g/dL)		3.05 ± 0.22	3.02 ± 0.26	2.95 ± 0.24	3.05	3.13 ± 0.29	3.15 ± 0.24	3.10 ± 0.27	3.05 ± 0.19	3.05 ± 0.21	3.00 ± 0.14	3.27 ± 0.15	3.33 ± 0.23	3.38 ± 0.19**	3.15
A/G (ratio)		1.367 ± 0.144	1.313 ± 0.131	1.375 ± 0.132	1.325	1.403 ± 0.090	1.313 ± 0.100	1.378 ± 0.036	1.375 ± 0.121	1.315 ± 0.103	1.345 ± 0.115	1.308 ± 0.052	1.192 ± 0.095	1.228 ± 0.076	1.205
TG (mg/dL)		37.2 ± 8.1	43.5 ± 18.3	43.0 ± 17.4	52.0	41.3 ± 29.7	42.5 ± 18.0	40.8 ± 18.8	56.5 ± 42.4	41.0 ± 15.8	36.5 ± 14.8	34.7 ± 9.6	34.2 ± 12.4	36.0 ± 11.7	39.5
T-cho (mg/dL)		131.8 ± 26.0	134.8 ± 19.4	122.2 ± 18.6	141.0	120.5 ± 19.6	110.3 ± 22.2	111.0 ± 17.2	120.0 ± 22.7	116.5 ± 23.9	107.0 ± 22.1	132.2 ± 17.0	123.0 ± 18.7	118.5 ± 16.5	128.0
Glucose (mg/dL)		78.3 ± 18.3	76.0 ± 9.2	71.7 ± 10.4	92.0	84.5 ± 15.2	82.5 ± 8.5	71.5 ± 6.5	80.0 ± 9.1	78.3 ± 1.9	70.0 ± 6.0	85.7 ± 19.9	85.5 ± 11.5	85.8 ± 9.0*	87.0
UN (mg/dL)		25.10 ± 4.95	24.50 ± 5.82	24.13 ± 4.47	30.35	23.85 ± 0.95	23.10 ± 1.28	23.78 ± 2.21	23.23 ± 3.73	22.70 ± 4.81	23.58 ± 2.48	24.22 ± 4.08	24.15 ± 4.28	24.78 ± 4.68	22.35
Cre (mg/dL)		0.678 ± 0.087	0.632 ± 0.074	0.645 ± 0.064	0.715	0.665 ± 0.037	0.648 ± 0.039	0.713 ± 0.046	0.693 ± 0.010	0.690 ± 0.045	0.725 ± 0.053	0.683 ± 0.059	0.672 ± 0.057	0.733 ± 0.060*	0.695
IP (mg/dL)		5.162 ± 0.722	5.768 ± 0.744	5.833 ± 0.646	5.670	5.680 ± 1.158	6.510 ± 0.888	5.993 ± 0.460	5.163 ± 0.909	5.945 ± 0.731	5.795 ± 0.571	5.930 ± 1.020	6.142 ± 0.865	5.770 ± 0.615	5.765
Ca (mg/dL)		9.97 ± 0.22	9.77 ± 0.37	9.72 ± 0.32	9.55	10.43 ± 0.75	10.50 ± 0.69*	10.35 ± 0.84	10.25 ± 0.25	10.03 ± 0.33	9.95 ± 0.17	10.12 ± 0.40	9.93 ± 0.29	9.97 ± 0.27	9.75
Na (mEq/L)		147.8 ± 1.0	146.5 ± 0.8	147.0 ± 0.9	146.0	150.5 ± 4.7	148.3 ± 1.3	148.3 ± 3.3	149.0 ± 2.3	146.5 ± 0.6	146.8 ± 2.5	148.0 ± 1.1	145.3 ± 2.1	146.7 ± 3.4	145.0
K (mEq/L)		4.65 ± 0.44	4.33 ± 0.37	4.53 ± 0.31	4.70	4.70 ± 0.58	4.85 ± 0.81	4.58 ± 0.91	4.55 ± 0.17	4.78 ± 0.39	4.50 ± 0.48	4.68 ± 0.60	4.70 ± 0.44	4.55 ± 0.30	4.70
Cl (mEq/L)		108.3 ± 3.1	106.5 ± 3.4	107.2 ± 2.6	105.0	109.0 ± 1.6	107.5 ± 2.4	107.0 ± 1.8	109.0 ± 2.6	109.5 ± 2.4	107.0 ± 2.2	106.8 ± 1.5	107.2 ± 1.2	106.8 ± 0.8	110.0
Fe (μg/dL)		155.20 ± 19.62	169.32 ± 40.13	178.35 ± 20.26	181.35	158.15 ± 21.59	158.43 ± 34.52	189.70 ± 11.40	179.00 ± 21.12	179.95 ± 58.21	204.25 ± 21.05	151.98 ± 20.71	138.93 ± 42.53	159.28 ± 24.65	153.00
UIBC (μg/dL)		253.38 ± 47.61	257.78 ± 48.98	230.98 ± 39.49	225.60	230.55 ± 34.50	234.35 ± 38.16	191.58 ± 22.16	247.65 ± 46.31	247.33 ± 76.49	208.70 ± 22.89	247.87 ± 61.96	256.48 ± 77.43	231.02 ± 63.17	194.90
FER (ng/mL)		9.20 ± 7.67	12.17 ± 6.81	10.95 ± 7.03	14.90	8.53 ± 5.13	22.35 ± 7.54	13.25 ± 7.48	15.88 ± 19.94	13.28 ± 6.93	16.48 ± 4.16	10.82 ± 6.98	76.43 ± 76.80	13.45 ± 7.57	11.30
Hp (mg/dL)		33.80 ± 27.05	25.25 ± 18.25	34.43 ± 18.81	42.10	14.00 ± 14.42	44.35 ± 15.90	22.23 ± 6.22	43.68 ± 34.22	34.68 ± 27.29	43.65 ± 15.80	32.50 ± 22.40	39.50 ± 26.45	34.00 ± 19.66	68.70
TIBC (μg/dL)		408.58 ± 47.87	427.10 ± 52.38	409.33 ± 46.05	406.95	388.70 ± 16.61	392.78 ± 28.50	381.28 ± 32.18	426.65 ± 38.73	427.28 ± 23.44	412.95 ± 38.31	399.85 ± 48.91	395.42 ± 52.60	390.30 ± 53.89	347.90

Female		Control				Pabinafusp alfa, 3 mg/kg			Pabinafusp alfa, 10 mg/kg			Pabinafusp alfa, 30 mg/kg			
		Pre (n = 6)	Week 13 (n = 6)	Week 26 (n = 6)	End of recovery (n = 2)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	Pre (n = 4)	Week 13 (n = 4)	Week 26 (n = 4)	End of recovery (n = 2)
AST (IU/L)		30.7 ± 7.4	34.8 ± 10.8	35.2 ± 13.0	34.0	34.3 ± 12.3	33.0 ± 11.9	31.8 ± 9.4	31.5 ± 5.8	41.5 ± 18.7	37.3 ± 16.2	40.3 ± 15.4	66.5 ± 48.8	33.5 ± 2.8	31.5
ALT (IU/L)		40.5 ± 17.6	43.7 ± 29.7	53.0 ± 32.2	74.0	46.8 ± 16.0</td									

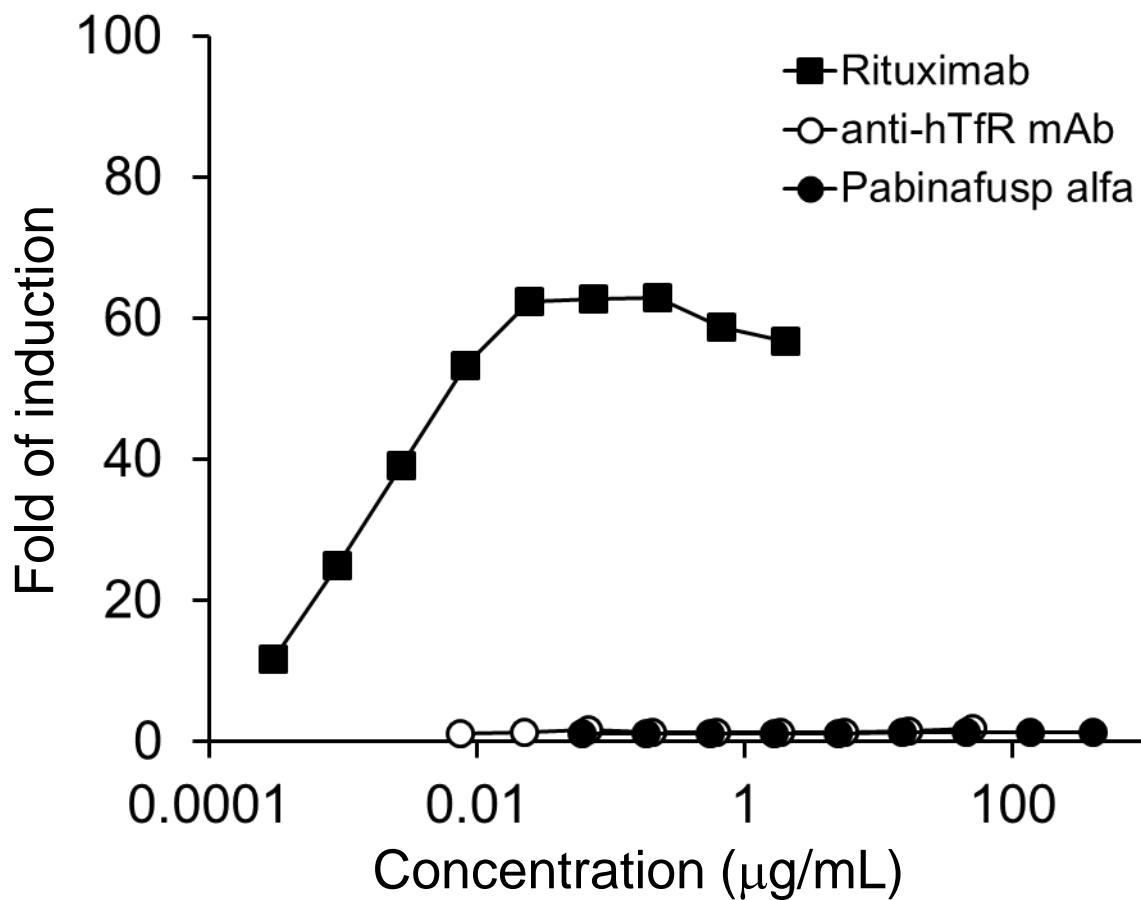


Figure S1. ADCC activity of rituximab as the positive control. Evaluation of effector functions of pabinafusp alfa. ADCC was assessed using the WIL2-S human B lymphoma cell line as target cells for rituximab and the CCRF-CEM human T lymphoma cell line as target cells for pabinafusp alfa. The assay was performed as described in Materials and Methods.

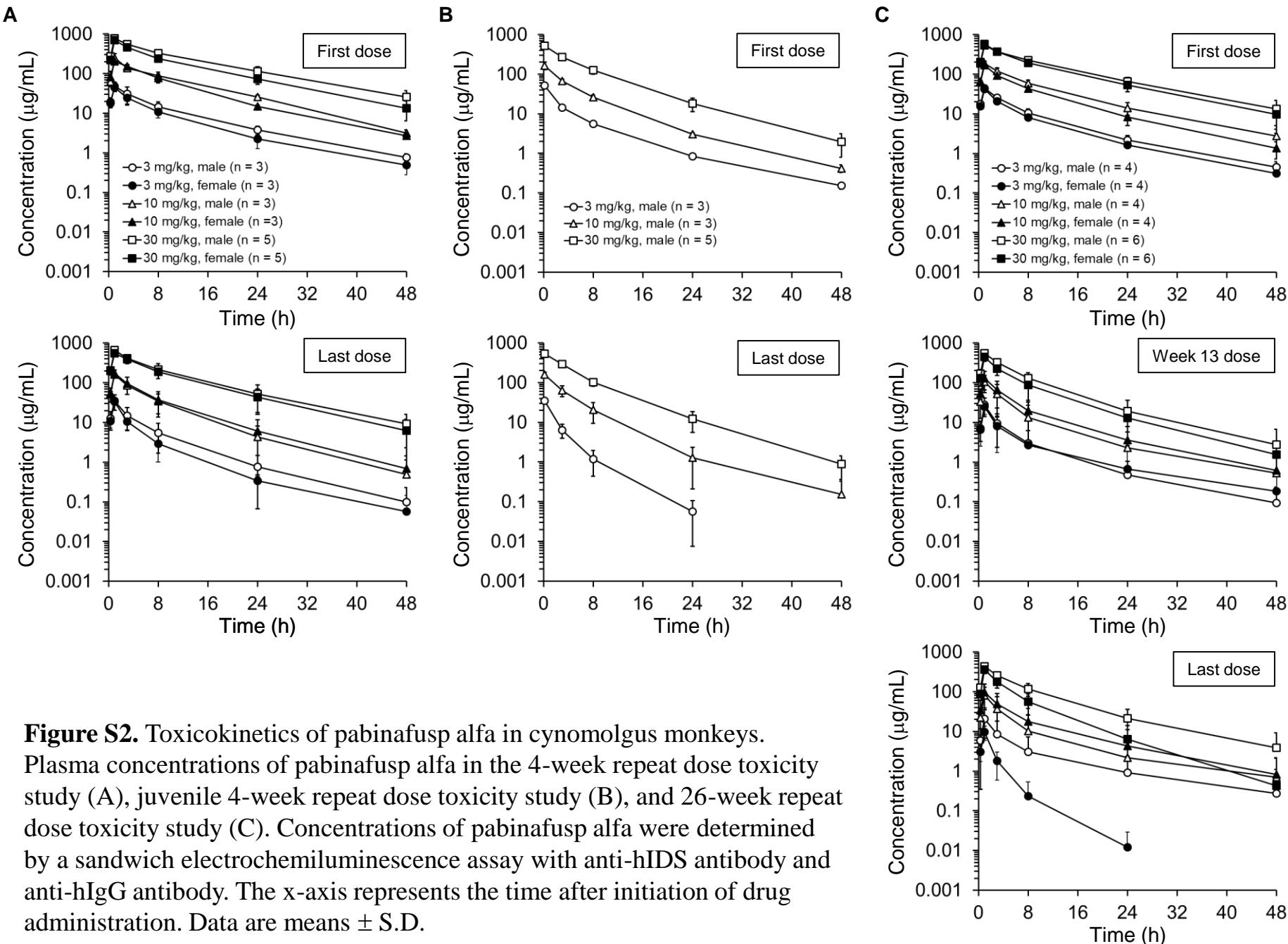


Figure S2. Toxicokinetics of pabinafusp alfa in cynomolgus monkeys. Plasma concentrations of pabinafusp alfa in the 4-week repeat dose toxicity study (A), juvenile 4-week repeat dose toxicity study (B), and 26-week repeat dose toxicity study (C). Concentrations of pabinafusp alfa were determined by a sandwich electrochemiluminescence assay with anti-hIDS antibody and anti-hIgG antibody. The x-axis represents the time after initiation of drug administration. Data are means \pm S.D.

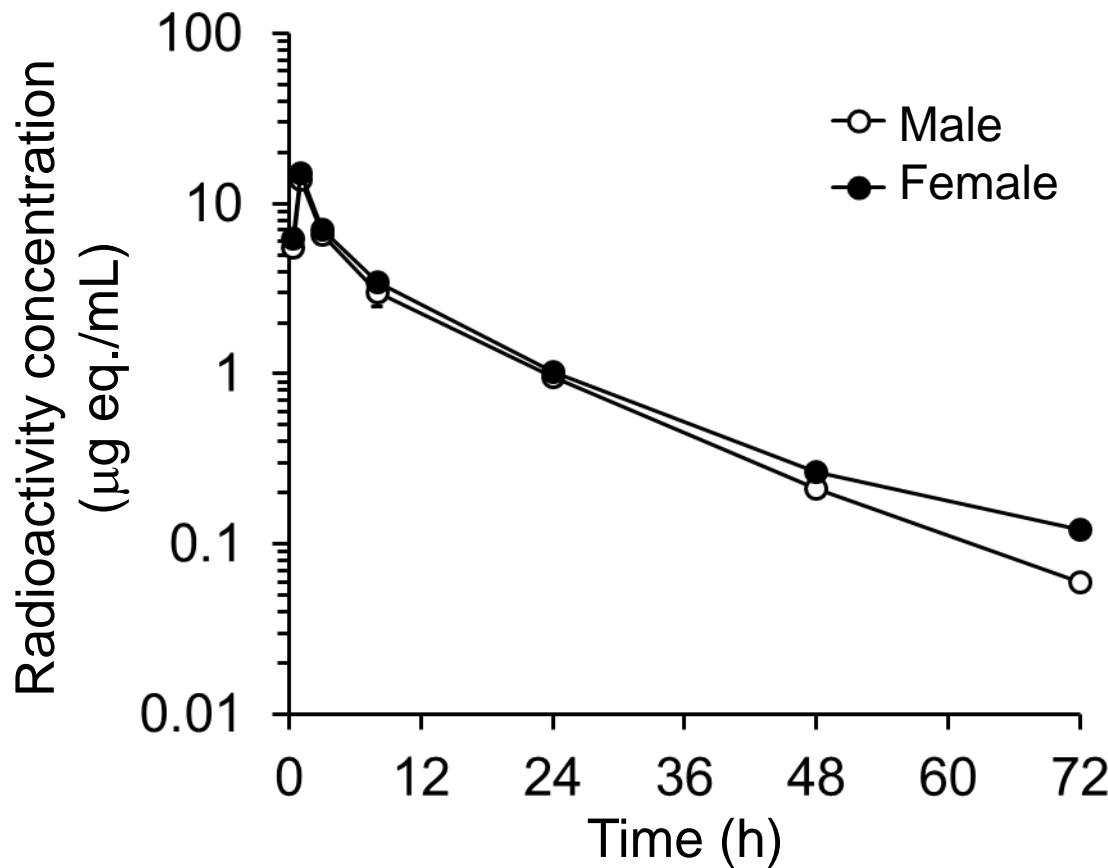


Figure S3. Pharmacokinetics in cynomolgus monkey after intravenous administration of ^{125}I -labeled pabinafusp alfa. The x-axis represents the time after initiation of drug administration. Data are means \pm S.D. bars (n = 5 for 20 min and 1 h, n = 4 for 3 h and 8 h, n = 3 for 24 h, n = 2 for 48 h, and n = 1 for 72 h).