

Table S1. *In vivo* distribution of DPC1-RhB in mice after oral administration at three different doses (n = 6).

Sample	Dose (mgkg ⁻¹)	30min	1h	2h	3h	4h	6h	8h	12h	24h
Plasma	150	51.469±4.764	117.373±13.580 *	44.174±6.782&	21.618±5.042* ^{&#}	9.752±6.105* ^{&#}	10.865±7.492* ^{&#}	2.722±4.004* ^{&#} *	0.758±3.095* ^{&#} *	-
	100	32.991±3.792	70.236±10.519*	14.076±6.632* ^{&}	9.068±2.460* ^{&}	2.514±6.835* ^{&}	13.822±4.028* ^{&}	-	-	0.657±1.873* * ^{&} _α
	50	16.531±3.254	33.952±10.980	14.764±5.689	6.462±4.579* ^{&}	9.486±3.214&	-	3.825±7.671* ^{&#}	0.034±1.494* ^{&#} §	1.233±1.444* ^{&#}
Liver	150	5.312±1.834	1.310±0.620*	4.009±1.181&	3.829±2.462&	2.182±1.470*	4.855±1.627&§	4.257±2.315&§	2.533±1.558* _α	3.669±1.409&
	100	4.685±2.201	2.524±1.442	2.918±0.853	3.424±1.712	4.678±1.816	2.298±1.668	3.890±1.417	2.483±1.646	4.414±2.474
	50	0.975±0.847	0.856±0.845	2.065±1.472	3.125±1.420	-	3.961±2.619	2.218±1.578	2.929±1.838	1.086±0.880
Heart	150	20.263±2.349	25.327±3.563	26.117±2.900	28.236±3.093	27.575±3.448	27.215±2.277	27.650±3.918	22.327±4.374	12.516±3.794* [§] _{αβ}
	100	14.071±1.971	20.782±3.058	22.300±3.298	21.759±2.250	23.692±3.611	25.004±3.838*	22.571±3.376	18.883±5.492	9.726±1.862 [§] _{αβ}
	50	7.446±0.801	13.247±2.985*	12.658±2.610*	13.111±1.796*	15.401±2.400*	17.456±1.577* * ^{&#} *	18.529±4.075* * ^{&#} §	12.704±3.141* _{αβ}	8.366±1.508& [§] _{αβθ}
Spleen	150	15.478±2.077	15.896±2.282	17.827±3.349	19.801±2.426	27.058±4.537	22.328±3.209	14.356±1.572§	14.501±1.198§	8.949±1.445* [§] _α
	100	11.275±2.453	11.882±1.936	14.439±3.174	17.178±2.397	19.827±1.805* ^{&}	17.083±2.181	11.485±1.600§	12.513±1.253	6.584±0.933* [§] _α
	50	9.549±1.932	11.353±2.245	11.587±1.162*	12.113±1.652*	15.601±1.960* * ^{&#} *	14.333±1.587* * ^{&#} *	10.282±1.335 [§] _α	9.131±1.285& [§] _α	4.873±1.064* * ^{&#} * [§] _{αβθ}

Lung	150	16.365±2.167	20.602±2.060*	23.032±1.648*&	24.674±1.740* ^{&}	21.385±1.282**	18.716±2.342* [#] §	15.891±1.698&# [*]	16.313±2.114&# [*]	2.108±0.803* ^{&#} §αβθ
	100	12.387±1.752	16.256±1.614*	20.580±2.335*&	19.486±1.247* ^{&}	17.607±1.590* [#]	15.402±1.138* [#] §	14.046±3.375&# [*]	8.802±1.618* ^{&#} §αβ	2.888±0.990* ^{&#} §αβθ
	50	9.288±1.322	12.582±1.843	18.562±2.232*	13.106±0.752	9.422±1.281 [#]	10.028±2.375	11.693±0.612	6.901±1.526* [#]	2.004±0.899&# [*] β
Kidney	150	3.712±0.810	4.737±0.688	3.989±1.287	8.703±2.077	9.653±2.261*	8.010±2.775	4.216±1.056	3.658±0.882§	3.082±1.633§
	100	1.544±0.548	3.169±1.125	2.506±0.949	4.072±1.470	4.031±1.429	7.510±1.725* [#]	4.246±0.570*	2.630±0.744 ^α	-
	50	-	0.520±0.385	1.951±0.880	4.226±0.848&	4.867±1.226&	7.314±1.228&#	1.474±0.308 ^α	-	-
Stomach	150	4.052±2.271	6.657±1.931	46.560±8.091* ^{&}	84.262±5.418* ^{&}	46.869±7.705* ^{&} ★	3.481±2.281 [#] ★§	1.055±0.981&# [*] ★§	-	-
	100	3.124±1.695	5.697±1.644	12.394±3.655*	68.935±6.460* ^{&#}	12.636±5.802*	1.373±0.820&# [*]	-	-	-
	50	1.388±0.956	4.008±1.641	8.361±3.669	20.005±4.956* ^{&#}	5.427±2.428*	1.705±1.193*	0.298±0.443&# [*]	-	-
Large intestine	150	17.846±2.282	26.644±4.248*	27.110±4.191*	38.963±6.805* ^{&#}	88.416±7.379* ^{&#} ★	70.180±5.113* ^{&#} ★§	31.470±3.976* [★] §α	14.178±2.097&# [*] ★	10.028±2.368* ^{&#} ★§αβ
	100	14.549±2.332	20.517±2.593	25.587±1.582*	36.106±3.976* ^{&#}	75.614±8.679* ^{&#} ★	64.667±4.678* ^{&#} ★	17.763±1.340 [#] ★§ ^α	11.481±3.776&# [*] ★ ^{§α}	9.783±2.334&# [*] ★§ ^{αβ}
	50	21.978±4.112	21.812±4.355	22.719±4.746	28.199±3.305	54.844±6.373	45.272±5.192	13.774±2.592§α§	13.047±2.615§ ^α	9.981±3.372* ^{§α}
Small intestine	150	171.719±15.949	255.659±23.957	167.378±15.249	41.691±11.215	32.334±5.572	5.799±3.187* ^{&#}	9.070±3.177* ^{&}	10.428±4.218* ^{&}	10.628±3.360&
	100	151.974±10.091	200.593±22.715	140.669±17.214&	25.482±7.236* ^{&#}	17.677±5.915* ^{&#}	5.768±2.754* ^{&#} ★	15.890±2.820* ^{&#} α	12.610±4.655* ^{&#}	7.536±3.681* ^{&#} ★

50	103.437±11.542	157.882±13.345	61.588±10.247	18.932±3.950	12.447±4.117 ^{&}	12.121±3.493 ^{&}	10.947±3.422 ^{*&}	12.046±2.887 ^{&}	9.223±5.366 ^{*&}
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^{*}*P* < 0.05, versus the 0.5 h group; [&]*P* < 0.05, versus the 1 h group; [‡]*P* < 0.05, versus the 2 h group; ^{*}*P* < 0.05, versus the 3 h group; [§]*P* < 0.05, versus the 4 h group; ^α*P* < 0.05, versus the 6 h group; ^β*P* < 0.05, versus the 8 h group; ^θ*P* < 0.05, versus the 12 h group.

Table S2. *In vivo* distribution of DPC1-RhB after intraperitoneal administration at three different doses (n = 6).

Sample	Dose (mgkg ⁻¹)	10min	30min	1h	2h	3h	4h	6h	8h	12h	24h
Plasma	100	205.118±10.858	184.683±31.954	125.598±15.432 [∂]	50.280±3.344 [∂] * _{&}	33.500±14.553 ∂* _{&}	3.592±3.073 [∂] * &#	-	1.803±3.969 [∂] * &#	-	-
	50	106.136±13.268	102.750±15.122	82.493±8.253	12.682±6.978 [∂] *	14.882±11.133 ∂*	-	-	-	0.465±6.634 [∂] * &	-
	25	72.395±17.064	65.566±7.443	48.096±9.471*	7.343±6.019 [∂] * &	-	-	-	-	-	-
Liver	100	4.230±2.135	3.092±0.906	6.498±2.970*	4.751±1.666	3.225±2.496 _{&}	2.635±1.511 _{&}	3.355±1.938 _{&}	4.395±2.152 _{&}	1.963±0.867 _{&#β}	-
	50	2.124±1.555	3.182±1.631	2.903±1.317	4.200±1.714	3.051±1.634	2.118±1.992	2.825±1.587	2.518±0.642	-	1.670±1.353
	25	-	1.736±0.859	2.416±1.379	4.263±2.425	-	4.740±2.962	-	3.355±1.849	1.013±0.819	-
Heart	100	9.379±2.968	16.237±2.587	23.827±3.801 [∂]	25.247±2.966 [∂] *	22.286±7.587	19.454±7.239	15.040±3.994 [#]	13.014±1.948 _{&} #	9.010±2.194* &#	5.228±0.562* &#β
	50	5.333±1.428	13.374±2.026 [∂]	19.113±1.421 [∂] *	21.047±2.831 [∂] *	20.086±4.401 [∂] *	16.758±4.449 [∂] #	12.016±4.291 [∂] &#*§	10.513±2.870 [∂] &#*§	7.281±1.650* &#*§α	5.097±1.365* &#*§αβ
	25	3.254±0.583	11.979±2.776 [∂]	15.645±3.478 [∂]	17.719±3.036 [∂]	16.492±4.947	12.623±6.071	9.024±3.888	7.166±2.690 _{&#}	5.240±1.641* &#	3.680±1.211* &#*
Spleen	100	21.356±2.562	31.016±2.827 [∂]	32.481±3.320 [∂]	27.136±2.751 [∂] * _{&}	26.510±3.521 [∂] * _{&}	28.145±2.922 [∂] &	23.123±2.169* &#*§	25.141±2.851 [∂] * _{&}	22.333±1.989* &#*§	14.829±2.267 [∂] * * _{&#} *§αβθ
	50	15.513±1.703	23.287±2.824	25.598±1.997 [∂]	22.582±2.851	25.129±2.731 [∂]	22.996±3.200	19.376±1.903	20.004±2.214	18.667±2.186	11.942±2.352* &#*§
	25	11.767±1.654	17.196±1.302 [∂]	18.533±2.065 [∂]	17.016±3.936 [∂]	18.169±2.644 [∂]	16.772±3.051 [∂]	15.434±3.241 [∂] &	15.810±2.086 [∂]	14.746±2.564 [∂] &*	7.781±1.879 [∂] * &#*§αβθ

Lung	100	21.464±1.536	22.651±2.867	26.676±2.803 [∂]	24.222±2.951	22.059±2.785	34.046±3.895 [∂] ★#	28.748±2.516 [∂] ★	24.738±2.993 [§]	11.802±2.457 ^{&} #§αβ	0.787±0.339 [*] &#★§αβ
	50	16.839±3.067	18.595±3.371	20.130±1.651	18.701±2.124	19.093±2.324	26.854±3.974 [∂] *&#★	24.116±4.191 [∂] *&#★	22.111±2.834 [∂] *§	9.382±2.552 [∂] [*] &#★§αβ	-
	25	10.587±1.979	12.367±1.202	17.908±1.469 [∂] *	14.943±2.103 [∂]	13.525±2.029 ^{&}	20.582±3.247 [∂] **	16.061±1.984 [∂] *	14.056±2.373 ^{&} §	4.279±1.471 ^{&#} ★§αβ	-
Kidney	100	3.950±0.700	14.033±1.020 [∂]	14.264±1.433 [∂]	13.184±0.777 [∂]	15.286±1.257 [∂]	14.117±2.400 [∂]	8.155±0.942 [*] &★	6.555±0.809 [*] &#★§	7.425±0.595 [*] &★§	-
	50	3.453±0.899	10.234±2.236 [∂]	10.892±2.386 [∂]	11.682±1.402 [∂]	10.962±1.382 [∂]	9.753±0.885 [∂] [#]	6.610±0.650 [∂] [*] &#★§	4.181±0.948 [*] &#★§α	5.865±0.866 [∂] [*] &#★§β	-
	25	-	4.131±0.893	4.451±0.952	7.838±1.303 [*] ^{&}	8.258±0.646 [*] ^{&}	4.542±0.785 [#] [*]	2.605±0.892 [*] &#★§	4.041±0.799 [#] [*] α	1.773±0.610 [*] &#★§β	-
Stomach	100	3.682±1.663	6.044±1.186 [∂]	6.925±1.653 [∂]	17.292±2.333 [∂] *&	5.309±1.259 [#]	4.578±1.827 ^{&#}	-	1.799±0.876 [∂] [*] &#★§	0.584±1.074 [∂] [*] &#★§	-
	50	3.318±1.877	5.818±1.518	5.424±0.713	15.807±1.887 [∂]	4.052±1.791 [#]	2.779±0.957 [#]	-	1.063±0.540 [*] &#★	1.160±0.892 [*] &#★	-
	25	-	4.808±1.581	6.096±1.669	10.340±2.084 [*] &	5.434±1.849 [#]	-	-	-	-	-
Large intestine	100	27.185±1.483	31.074±1.471	37.989±1.390 [∂]	24.866±3.220 [*] &	29.672±4.873	27.089±1.001 ^{&}	21.978±5.195 [*] &★	21.238±2.053 [*] &★	19.385±5.219 [∂] *&★	10.908±0.964 [∂] *&#★§
	50	20.291±3.534	23.578±3.185	32.717±2.334	21.168±4.003	21.370±2.828	16.074±3.125 ^{&}	22.008±3.812	21.147±3.528	16.581±4.406 ^{&}	10.144±3.118 [*] &
	25	13.908±2.867	21.629±1.232 [∂]	28.642±1.809 [∂]	18.849±3.373 [∂] &	17.161±0.766 ^{&}	18.925±3.485 [∂] &	17.442±4.216 ^{&}	17.819±2.266 ^{&}	15.887±2.788 [*] &	11.696±2.898 [*] &#★§αβ
Small intestine	100	20.578±5.854	55.242±6.053	22.665±4.000	34.387±5.979	19.598±4.936	15.562±2.992 [*]	23.134±4.727	15.505±4.359 [*]	13.994±3.522 [*] #	9.348±3.686 [*] [#]
	50	19.557±4.023	40.676±4.630	17.585±3.542	31.309±4.928	24.708±5.194	20.100±4.099	18.230±4.006	15.328±3.072 [*] #	14.537±3.995 [*] #	11.839±2.653 [*] #★

25	16.713±6.969	34.133±5.603 [∂]	21.953±1.286 [*]	37.649±5.225 [∂]	21.875±5.088 [*] #	20.531±5.327 [*] #	15.912±4.517 [*] &#★	13.339±4.453 [*] &#★§	11.042±4.296 [∂] *&#★§	9.491±2.905 ^{∂*} &#★§α
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[∂]*P* < 0.05, versus the 0.17 h group; ^{*}*P* < 0.05, versus the 0.5 h group; [&]*P* < 0.05, versus the 1 h group; [#]*P* < 0.05, versus the 2 h group; ^{*}*P* < 0.05, versus the 3 h group; [§]*P* < 0.05, versus the 4 h group; ^α*P* < 0.05, versus the 6 h group; ^β*P* < 0.05, versus the 8 h group; ^θ*P* < 0.05, versus the 12 h group.