

Figure	Panel	Curve	Parameter	Value
3	A-D	100x	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	10000
3	A-D	10x	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	1000
3	A-D	1x	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	100
3	A-D	0.1x	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	10
3	A-D	0.01x	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	1
3	E-H	100x	Km_tp_X_c @ABC0_c	7000
3	E-H	10x	Km_tp_X_c @ABC0_c	700
3	E-H	1x	Km_tp_X_c @ABC0_c	70
3	E-H	0.1x	Km_tp_X_c @ABC0_c	7
3	E-H	0.01x	Km_tp_X_c @ABC0_c	0.7
4	all	100x	Km_cj_X'c @GST_c, Km_cj_X'b_c @GST_c	5000000
4	all	10x	Km_cj_X'c @GST_c, Km_cj_X'b_c @GST_c	500000
4	all	1x	Km_cj_X'c @GST_c, Km_cj_X'b_c @GST_c	50000
4	all	0.1x	Km_cj_X'c @GST_c, Km_cj_X'b_c @GST_c	5000
4	all	0.01x	Km_cj_X'c @GST_c, Km_cj_X'b_c @GST_c	500
6	A	[X <sub>c,crit</sub> ] = 0.05 nM	P_Toxicity_X_c	20
6	A	[X <sub>c,crit</sub> ] = 0.5 nM	P_Toxicity_X_c	2
6	A	[X <sub>c,crit</sub> ] = 5 nM	P_Toxicity_X_c	0.2
6	A	[X <sub>c,crit</sub> ] = 5000 nM	P_Toxicity_X_c	0.0002
6	B	all	P_Toxicity_X_c	20
6	C	all	P_Toxicity_X_c	0.0002
6	B-C	0.2x ABC <sub>0</sub> transcription	k_ts_ABC0_gene,a_n	0.0018
6	B-C	5x CYP transcription	k_ts_CYP_gene,a_n	5.35
6	B-C	0.2x CYP transcription	k_ts_CYP_gene,a_n	0.214
6	B-C	5x ABC <sub>0</sub> transcription	k_ts_ABC0_gene,a_n	0.045
S2		all	P_Toxicity_X'c, P_Toxicity_X'b_c	0.0002
S2		all	P_Toxicity_X''c, P_Toxicity_X''b_c	2.00E-07
S3	all	K <sub>m,ABC0</sub> = 100x, rate of diffusion = 0.033x	Km_tp_X_c @ABC0_c	7000
S3	all	K <sub>m,ABC0</sub> = 100x, rate of diffusion = 0.033x	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	3.3

S3	all	$K_{m,ABC0} = 10x$ , rate of diffusion = $0.13x$	Km_tp_X_c_@ABC0_c	700
S3	all	$K_{m,ABC0} = 10x$ , rate of diffusion = $0.13x$	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	13
S3	all	$K_{m,ABC0} = 1x$ , rate of diffusion = $1x$	Km_tp_X_c_@ABC0_c	70
S3	all	$K_{m,ABC0} = 1x$ , rate of diffusion = $1x$	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	100
S3	all	$K_{m,ABC0} = 0.1x$ , rate of diffusion = $7x$	Km_tp_X_c_@ABC0_c	7
S3	all	$K_{m,ABC0} = 0.1x$ , rate of diffusion = $7x$	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	700
S3	all	$K_{m,ABC0} = 0.01x$ , rate of diffusion = $20x$	Km_tp_X_c_@ABC0_c	0.7
S3	all	$K_{m,ABC0} = 0.01x$ , rate of diffusion = $20x$	k_df_1_X_c, k_df_2_X_c, k_df_X_e, k_df_X_n	2000