

Milestone 1 Report for

Schering AG

Gpx5 KO (SHG0013)



Summary

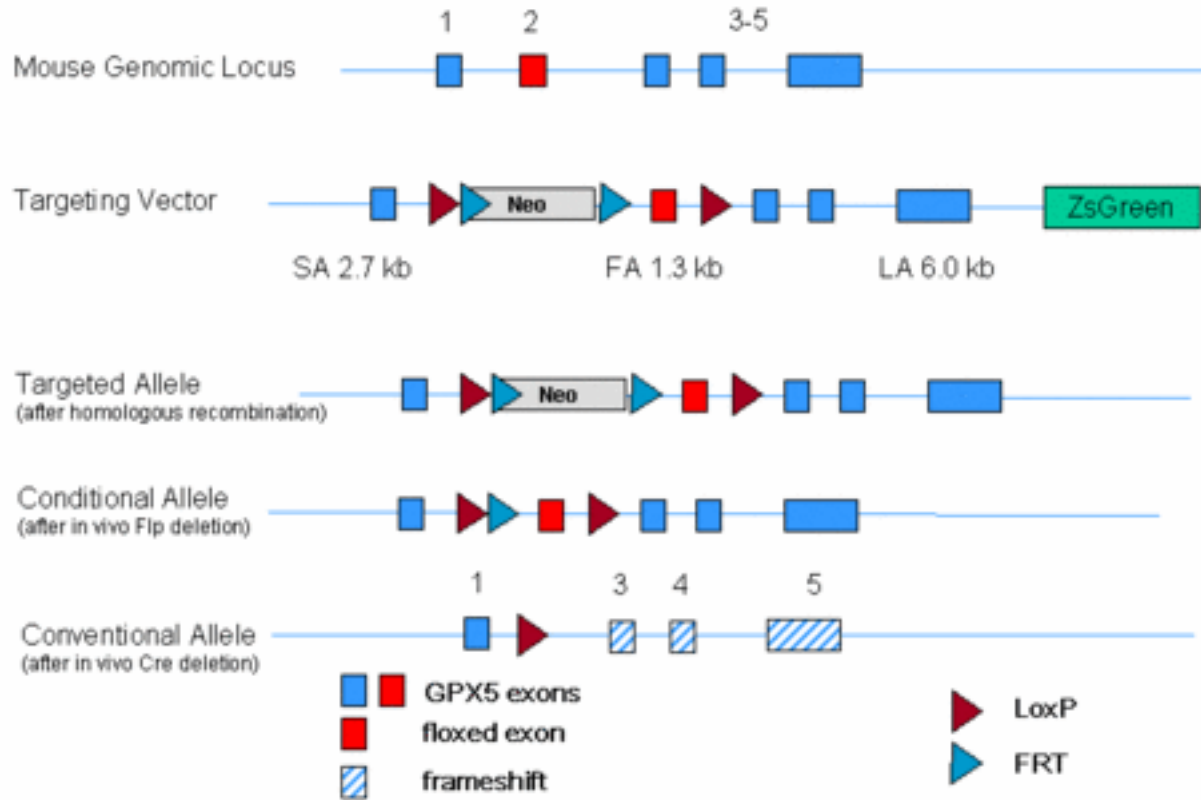
Customer	Schering AG
Project	Gpx5 KO
Description	Conditional KO of the GPX5 Gene
Official Start Date	2005-07-18
Official Finish Date	2005-08-21
Issue Date	2005-09-02

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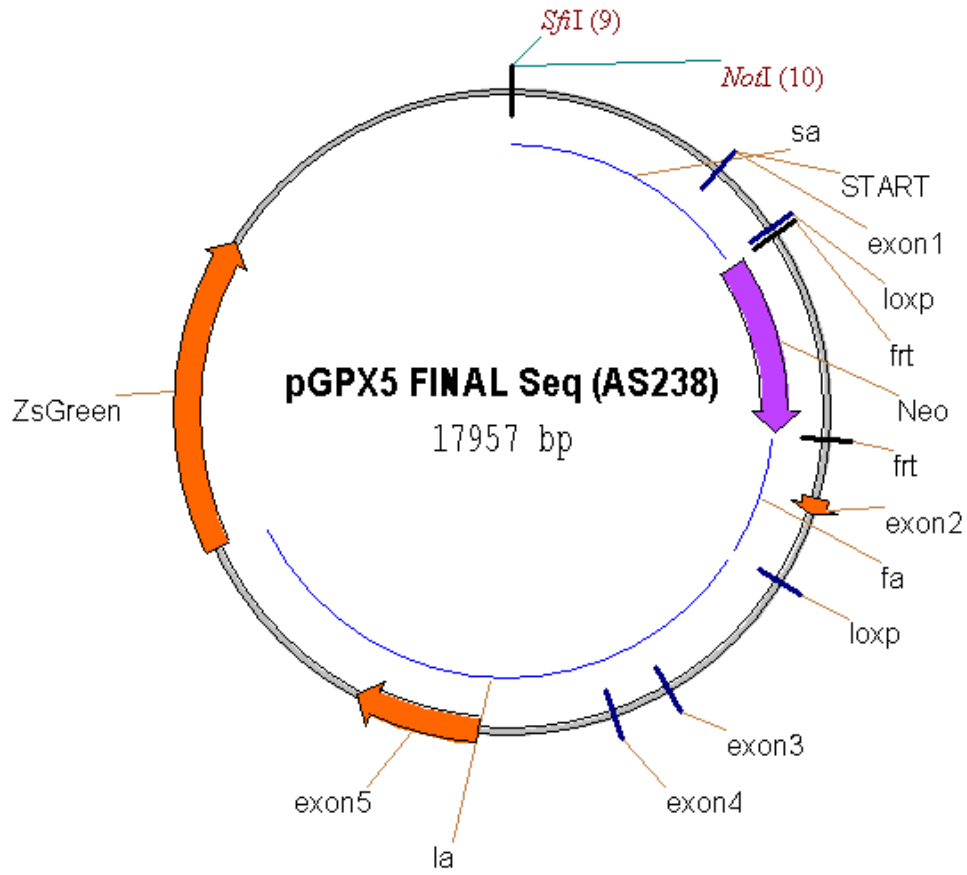
Overview Targeting Strategy

Conventional / Conditional KO of GPX5



- Conditional Targeting strategy as previously agreed on
- Deletion of exons 2 results in null allele by generating a frame shift
- FRT flanked selection marker, allows in vivo deletion of selection marker
- Targeting strategy allows to generate conditional and constitutive KO in parallel
- Generation of targeting vector with C57BL/6J BAC DNA

Final Targeting Vector



Vector Sequence

BASE COUNT	4527 a	4229 c	4546 g	4655 t	0 n	
ORIGIN						
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121	attcaacctg	gactacacaa	gctcttgtct	caaaaataaa	aaaaaaaaaa	gatgttcaat
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301	gttgtgaagt	aacctagtgc	agccactatg	aaactcagga	tggaggattc	tcaaaatcga
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481	ataatggaat	tttattcaac	cataaagaaa	aataaaattg	tggcatagaa	atgaatgata
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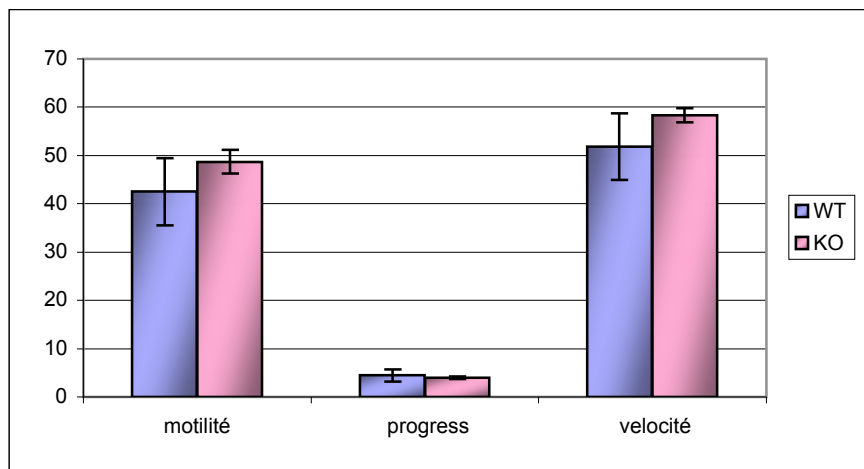
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		motility	progress	velocity fast	med	slow	Velocity
WT1	Q1	29.00	2.00	12.00	17.00	9.00	38.00
	Q2	28.00	2.00	11.00	17.00	10.00	38.00
	moy WT1	28.50	2.00	11.50	17.00	9.50	38.00
	ET WT1	0.71	0.00	0.71	0.00	0.71	0.00
WT2	Q1	64.00	8.00	31.00	33.00	9.00	73.00
	Q2	36.00	4.00	15.00	21.00	10.00	46.00
	moy WT2	50.00	6.00	23.00	27.00	9.50	59.50
	ET WT2	19.80	2.83	11.31	8.49	0.71	19.09
WT3	Q1	60.00	7.00	31.00	28.00	11.00	70.00
	Q2	38.00	4.00	19.00	19.00	8.00	46.00
	moy WT3	49.00	5.50	25.00	23.50	9.50	58.00
	ET WT3	15.56	2.12	8.49	6.36	2.12	16.97

	motility	progress	velocity fast	med	slow	Velocity
moy WT	42.50	4.50	19.83	22.50	9.50	51.83
ET WT	12.13	2.18	7.29	5.07	0.00	12.00
SEM	7.01	1.26	4.21	2.93	0.00	6.93

		motilité	progress	vélocité rap	med	slow	Vélocité
KO1	Q1	38.00	3.00	16.00	21.00	13.00	50.00
	Q2	51.00	5.00	27.00	24.00	10.00	61.00
	moy KO1	44.50	4.00	21.50	22.50	11.50	55.50
	ET KO1	9.19	1.41	7.78	2.12	2.12	7.78
KO2	Q1	51.00	1.00	34.00	16.00	5.00	55.00
	Q2	55.00	6.00	33.00	22.00	9.00	64.00
	moy KO2	53.00	3.50	33.50	19.00	7.00	59.50
	ET KO2	2.83	3.54	0.71	4.24	2.83	6.36
KO3	Q1	55.00	6.00	29.00	26.00	10.00	65.00
	Q2	42.00	3.00	16.00	26.00	13.00	55.00
	moy KO3	48.50	4.50	22.50	26.00	11.50	60.00
	ET KO3	9.19	2.12	9.19	0.00	2.12	7.07

	motilité	progress	vélocité rap	med	slow	Vélocité
moy KO	48.67	4.00	25.83	22.50	10.00	58.33
ET KO	4.25	0.50	6.66	3.50	2.60	2.47
SEM	2.46	0.29	3.84	2.02	1.50	1.42



		VAP $\mu\text{m/s}$	VSL $\mu\text{m/s}$	ALH μm
WT1	Q1	47.80	28.30	5.20
	Q2	44.90	26.70	5.30
	moy WT1	46.35	27.50	5.25
	ET WT1	2.05	1.13	0.07
WT2	Q1	62.90	40.50	6.90
	Q2	57.90	37.60	5.60
	moy WT2	60.40	39.05	6.25
	ET WT2	3.54	2.05	0.92
WT3	Q1	61.20	39.20	6.60
	Q2	56.90	31.90	4.40
	moy WT3	59.05	35.55	5.50
	ET WT3	3.04	5.16	1.56

	VAP $\mu\text{m/s}$	VSL $\mu\text{m/s}$	ALH μm	
moy WT	55.27	34.03	5.67	VAP Path velocity VSL Prog velocity ALH Lateral Amplitude
ET WT	7.75	5.92	0.52	
SEM	4.48	3.42	0.30	

		VAP $\mu\text{m/s}$	VSL $\mu\text{m/s}$	ALH μm
KO1	Q1	64.40	40.10	7.70
	Q2	54.70	34.10	7.50
	moy KO1	59.55	37.10	7.60
	ET KO1	6.86	4.24	0.14
KO2	Q1	86.00	54.20	7.60
	Q2	67.60	40.60	6.10
	moy KO2	76.80	47.40	6.85
	ET KO2	13.01	9.62	1.06
KO3	Q1	45.30	27.10	6.10
	Q2	53.60	33.90	7.20
	moy KO3	49.45	30.50	6.65
	ET KO3	5.87	4.81	0.78

	VAP $\mu\text{m/s}$	VSL $\mu\text{m/s}$	ALH μm
moy KO	61.93	38.33	7.03
ET KO	13.83	8.52	0.50
SEM	7.98	4.92	0.29

