

Supplemental table 1. List of mouse phenotype with altered LIFR/Gp130 – STAT3 signals

Gene	Defective uterine part	Genotype	Embryo implantation	Proliferation of the uterine epithelial cells	STAT3 status in the uterine epithelium	Reference
<i>Stat3</i>	Whole uterus	<i>Pgr^{Cre}-Stat3</i>	Failure	Sustained	Non-phosphorylated	PMID: 23885093
	Whole uterus	<i>Pgr^{Cre}-Stat3</i>	Failure	Sustained	ND	PMID: 32968170
	Whole uterus	<i>Pgr^{iresCre}-Stat3</i>	Failure	ND	ND	PMID: 34402137
	Uterine epithelium	<i>Wnt7a-Cre-Stat3</i>	Failure	ND	ND	PMID: 24100212
	Uterine epithelium	<i>Ltf^{Cre}-Stat3</i>	Failure	Suppressed	Non-phosphorylated	PMID: 32968170
	Stroma	<i>Amhr2^{Cre}-Stat3</i>	Embryonic resorption	ND	ND	PMID: 24983622
	Stroma	<i>Amhr2^{Cre}-Stat3</i>	Failure	Sustained	Phosphorylated	PMID: 32968170
<i>Lifr</i>	Uterine epithelium	<i>Ltf^{Cre}-Lifr</i>	Severe loss of litters	ND	Non-phosphorylated	PMID: 28368537
	Uterine epithelium	<i>Ltf^{Cre}-Lifr</i>	Failure	Suppressed	Non-phosphorylated	PMID: 34402888
	Stroma	<i>Amhr2^{Cre}-Lifr</i>	No phenotype	Suppressed	Phosphorylated	PMID: 34402888
<i>Gp130</i> (<i>Il6st</i>)	Whole uterus	<i>Pgr^{Cre}-Gp130</i>	Failure	Sustained	ND	PMID: 23885093
	Whole uterus	<i>Pgr^{iresCre}-Gp130</i>	Failure	ND	ND	PMID: 34402137
	Uterine epithelium	<i>Ltf^{Cre}-Gp130</i>	Failure	Suppressed	Non-phosphorylated	Present study

ND, not determined