

Table S1. Core methylation-dependent candidate genes

<u>Gene</u>	<u>Tissue of expression</u>	<u>Function</u>
<i>Asz1</i>	Germline	piRNA pathway*
<i>Mov10l1</i>	Germline	piRNA pathway*
<i>Mili</i>	Germline	piRNA pathway*
<i>Tex19.1</i>	Germline	Post-transcriptional regulation*
<i>Dazl</i>	Germline	Post-transcriptional regulation*
<i>Tex19.2</i>	Germline	Post-transcriptional regulation? *
<i>Rps4y2</i>	Germline	Ribosomal protein
<i>Rhox5</i>	Testis/Germline?	Transcriptional regulation
<i>LAP</i>	Germline	Retrotransposon
<i>1700034E13Rik</i>	Germline	ND
<i>4930550L24Rik</i>	Germline	ND
<i>Rhox4d</i>	Germline	ND
<i>Tex13</i>	Germline	ND
<i>Akr1c12</i>	Digestive system	Aldo-Keto metabolism
<i>Aldh3a1</i>	Eye	Aldehyde bioprocessing
<i>Gpr97</i>	Haematopoetic system	G-protein receptor
<i>Nckap11</i>	Haematopoetic system	Cell polarity
<i>Slc15a3</i>	Haematopoetic system	Biomolecule transport
<i>Slc47a1</i>	Kidney	Biomolecule transport
<i>Gstp2</i>	Liver	Metabolism
<i>Tnnt1</i>	Muscle/Adipose	Muscle function
<i>Casp1</i>	Semi-ubiquitous	Apoptosis
<i>Iigp2</i>	Semi-ubiquitous	GTPase
<i>Prelp</i>	Semi-ubiquitous	ND
<i>Xlr4a</i>	Semi-ubiquitous	ND
<i>Xist</i>	Semi-ubiquitous	X-chromosome inactivation