

Table S3. List of all mixed Rosetta Stone (MRS) genes and examples of the involved hybrid events with dual identities

MRS genes	Identity	
	Hybrid gene	Component gene
AK131276	AK127911 — AK131276 — AK091126	<pre> graph TD AK131276 --- AF424542 AF424542 --- AF194537 AF424542 --- AK125782 </pre>
AK097143	AF194537 — AK097143 — AK095784	<pre> graph LR AK097143 --- NM_001012976 NM_001012976 --- NM_207471 </pre>
AK095784	AK127765 — AK095784 — AK124630	<pre> graph TD AK095784 --- NM_001012976 NM_001012976 --- AF258574 NM_001012976 --- AK126238 </pre>
NM_006267	BX537861 — NM_006267 — CR749330	<pre> graph LR NM_006267 --- CR749330 CR749330 --- NM_005054 </pre>
NM_032260	BX537861 — NM_032260 — CR749330	<pre> graph LR NM_032260 --- CR749330 CR749330 --- NM_005054 </pre>
NM_001012976	<pre> graph TD NM_001012976 --- AK095784 NM_001012976 --- AF258574 NM_001012976 --- AK126238 </pre>	<pre> graph LR NM_001012976 --- AK097143 AK097143 --- AF194537 </pre>
NM_207471	AK091740 — NM_207471 — AK129962	<pre> graph TD NM_207471 --- AF424542 AF424542 --- AK131256 AF424542 --- AK095784 </pre>
AK091740	<pre> graph TD AK091740 --- AK127765 AK091740 --- AK124630 AK091740 --- AK093664 </pre>	<pre> graph LR AK091740 --- NM_207471 NM_207471 --- AK129962 </pre>
AK131256	AK127911 — AK131256 — AK091126	<pre> graph TD AK131256 --- AF424542 AF424542 --- AK095784 AF424542 --- NM_207471 </pre>
AK131313	AK127911 — AK131313 — AK091126	<pre> graph TD AK131313 --- AF424542 AF424542 --- AK127847 AF424542 --- AK127320 </pre>
CR749330	NM_006267 — CR749330 — NM_005054	<pre> graph LR CR749330 --- NM_032260 NM_032260 --- BX537861 </pre>
AK125948	AK097920 — AK125948 — AK095757	<pre> graph TD AK125948 --- AF424542 AF424542 --- AK127765 AF424542 --- AK124630 </pre>

Note: In simplified notation, we use the N -polygon to represent the detected N -hybrid events (i.e., N -hybrid gene is in the center and connects to the corresponding component genes in N vertexes). MRS genes are circumscribed by a rectangle.