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Porcine Reverse

Descriptions

Sequences producing significant alignments:

Select: All None Selected

Alignments	Descriptions	Max score	Total score	Query cover	E value	Ident	Accession
☐	Sus scrofa isolate WBMoroc1 cytochrome b (CYTB) gene, complete cds, and tRNA-Thr gene, partial seg	44.1	44.1	100%	0.024	100%	KU664553.1
☐	Sus scrofa isolate WBMoroc1 cytochrome b (CYTB) gene, complete cds, and tRNA-Thr gene, partial seg	44.1	44.1	100%	0.024	100%	KU664548.1
☐	Sus scrofa isolate WBMoroc1 cytochrome b (CYTB) gene, complete cds, and tRNA-Thr gene, partial seg	44.1	44.1	100%	0.024	100%	KU664547.1
☐	Sus scrofa isolate WBMoroc2 cytochrome b (CYTB) gene, complete cds, and tRNA-Thr gene, partial seg	44.1	44.1	100%	0.024	100%	KU664545.1
☐	Sus scrofa isolate WBMoroc1 cytochrome b (CYTB) gene, complete cds, and tRNA-Thr gene, partial seg	44.1	44.1	100%	0.024	100%	KU664546.1
☐	Sus scrofa isolate Vietnam MBT4 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982650.1
☐	Sus scrofa isolate Vietnam BV02 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982651.1
☐	Sus scrofa isolate Vietnam BA19 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982651.1
☐	Sus scrofa isolate Vietnam BA9 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982654.1
☐	Sus scrofa isolate Vietnam BA7 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982653.1
☐	Sus scrofa isolate Vietnam MCN16 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982652.1
☐	Sus scrofa isolate Vietnam MCC09 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982651.1
☐	Sus scrofa isolate Vietnam MCB40 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982650.1
☐	Sus scrofa isolate Vietnam MCB27 mitochondrion, complete genome	44.1	44.1	100%	0.024	100%	KX982649.1

Descriptions

Sequences producing significant alignments:

Select: All None Selected:0

Alignments	GenBank	Graphics	Distance tree of results								
					Description	Max score	Total score	Query cover	E value	Ident	Accession
☐	Sus scrofa mRNA clone: DCl010010A07 expressed in dendritic cells (immature)					50.1	50.1	100%	7e-04	100%	AK399531.1
☐	Sus scrofa isolate WBMoroc1 cytochrome b (CYTB) gene, complete cds; and tRNA-Thr gene, partial seq					50.1	50.1	100%	7e-04	100%	KU664548.1
☐	Sus scrofa isolate WBMoroc3 cytochrome b (CYTB) gene, complete cds; and tRNA-Thr gene, partial seq					50.1	50.1	100%	7e-04	100%	KU664547.1
☐	Sus scrofa isolate WBMoroc2 cytochrome b (CYTB) gene, complete cds; and tRNA-Thr gene, partial seq					50.1	50.1	100%	7e-04	100%	KU664546.1
☐	Sus scrofa isolate WBMoroc1 cytochrome b (CYTB) gene, complete cds; and tRNA-Thr gene, partial seq					50.1	50.1	100%	7e-04	100%	KU608293.1
☐	Sus scrofa mitochondrial Cytb gene for cytochrome b, partial cds, note: 54 PHLEBO					50.1	50.1	100%	7e-04	100%	LC088167.1
☐	Sus scrofa mitochondrial Cytb gene for cytochrome b, partial cds, note: 53 PHLEBO					50.1	50.1	100%	7e-04	100%	LC088166.1
☐	Sus scrofa mitochondrial Cytb gene for cytochrome b, partial cds, note: 73 PHLEBO					50.1	50.1	100%	7e-04	100%	LC088165.1
☐	Sus scrofa mitochondrial Cytb gene for cytochrome b, partial cds, note: 66 PHLEBO					50.1	50.1	100%	7e-04	100%	LC088164.1
☐	Sus scrofa mitochondrial Cytb gene for cytochrome b, partial cds, note: 64 PHLEBO					50.1	50.1	100%	7e-04	100%	LC088163.1
☐	Sus scrofa mitochondrial Cytb gene for cytochrome b, partial cds, note: 58 PHLEBO					50.1	50.1	100%	7e-04	100%	LC088162.1
☐	Sus scrofa mitochondrial Cytb gene for cytochrome b, partial cds, note: 56 PHLEBO					50.1	50.1	100%	7e-04	100%	LC088161.1

APPENDIX 2: The Calculation of Annealing Temperature

Primer	Sequence	
Bovine	Forward	5'-CCCGATTCTTCGCTTTCCAT-3'
	Reverse	5'-CTACGTCTGAGGAAATTCCTGTTG-3'
Porcine	Forward	5'-CTTGCAAATCCTAACAGGCCTG-3'
	Reverse	5'-CGTTTGCATGTAGATAGCGAATAAC-3'

$$T_m = 2\text{ }^{\circ}\text{C (A + T)} + 4\text{ }^{\circ}\text{C (G + C)}$$

Bovine Primer

Forward

$$\begin{aligned} T_m &= 2\text{ }^{\circ}\text{C (2+8)} + 4\text{ }^{\circ}\text{C (2+8)} \\ &= 60\text{ }^{\circ}\text{C} \end{aligned}$$

Reverse

$$\begin{aligned} T_m &= 2\text{ }^{\circ}\text{C (5+8)} + 4\text{ }^{\circ}\text{C (6+5)} \\ &= 70\text{ }^{\circ}\text{C} \end{aligned}$$

$$\begin{aligned} \text{Means} &= (60\text{ }^{\circ}\text{C} + 70\text{ }^{\circ}\text{C}) / 2 \\ &= 65\text{ }^{\circ}\text{C} \end{aligned}$$

$$T_a = 60\text{ }^{\circ}\text{C}$$

Porcine Primer

Forward

$$\begin{aligned} T_m &= 2\text{ }^{\circ}\text{C (6+5)} + 4\text{ }^{\circ}\text{C (4+7)} \\ &= 66\text{ }^{\circ}\text{C} \end{aligned}$$

Reverse

$$\begin{aligned} T_m &= 2\text{ }^{\circ}\text{C (8+7)} + 4\text{ }^{\circ}\text{C (6+3)} \\ &= 66\text{ }^{\circ}\text{C} \end{aligned}$$

$$\begin{aligned} \text{Means} &= (66\text{ }^{\circ}\text{C} + 66\text{ }^{\circ}\text{C}) / 2 \\ &= 66\text{ }^{\circ}\text{C} \end{aligned}$$

$$T_a = 61\text{ }^{\circ}\text{C}$$