

	4630	4640	4650	4660	4670	4680	4690	4700	4710	4720	4730
1 Cattle	aaccatttta	aaatctagta	taagtttaga	gctactc-ac	tcttctggct	tatctatgct	-tgtattta-	cttct--gtt	ttcaaaaaat	tttttaatgt	gaccatacct
2 Cattle2	aaccatttta	aaatctagta	taagtttaga	gctactc-ac	tcttctggct	tatctatgct	-tgtattta-	cttct--gtt	ttcaaaaaat	tttttaatgt	gaccatacct
3 Chicken	atcaagagga	aaagcacatc	ttagttgtaa	gatccaccac	agatttgagt	cttcaatagt	-tggaagagg	ccactgagat	atcaatactg	gccacaccac	ctccaccat
4 Human											
5 Catfish	a--aactgac	agatcgag--	-gagtttaag	g-----	-----ggtt	aatttgtgct	ctgtgtgcag	ct--taag--	--caa--gt	gtcacacacc	gatcccaca-
6 Bream	atcaaga---	-----c	tta-----	-----	agactt--t	ct-----	---gaa-ag-	-cagtta---	atcaacacag	---actccat	gtaggcgca-
7 Pig_mRNA	--caag-----	-----c	-----gtaa	-----c	aga-----	-----	-----	-----	-----	--cacacca-	-----
	4740	4750	4760	4770	4780	4790	4800	4810	4820	4830	4840
1 Cattle	tttatt-tcc	at----ttat	tgatata-at	tt--acaaca	aaagattata	cttgcaagct	ttatggttt	taa-atggtc	ttttttgtag	tgaatatcat	atctaaatga
2 Cattle2	tttatt-tcc	a----gttat	tgatata-at	tt--acaaca	aaagattata	cttgcaagct	ttatggttt	taa-atggtc	ttattttag	tgaatatcat	atctaaatga
3 Chicken	tcaaatatcc	aacacgggtg	tctcacacat	gtggacaagc	taaggttttt	ct-ggaatta	tcaccatctg	taataacaaa	ctgaatgaag	agcaatgcag	agtcagatgc
4 Human											
5 Catfish	-----atgc	atca----gt	tcgtgtacc-	gtcttcattc	gattactagt	gcagctagc-	taaccgtgtt	cggt-----	-tgtgtgtag	ttagaagaat	a-----agga
6 Bream	-ca-----cc	-----tg-	-----cat	ttggacaaa	----gc----	cc-gg-----	tc--ca-c--	-aataac--	ctcaa-----	-----	-----
7 Pig_mRNA	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4850	4860	4870	4880	4890	4900	4910	4920	4930	4940	4950
1 Cattle	tatctaaa--	-tgtaaagta	aatcatacct	--aaat----	-gaaaacata	ttctttaag-	acattataaa	atthttccagg	tgatcaattt	t-tctttaaa	tatactacat
2 Cattle2	tatctaaa--	-tgtaaagta	aatcatacct	--aaat----	-gaaaacata	ttctttaagt	-cattataaa	atthttccagg	tgatcaattt	t-tctttaaa	tatactacat
3 Chicken	tctgcagacc	atgtgagaga	aaatgtatct	tcacattcct	tcagctcctc	tccatccact	acatagtggg	atgctcctct	ccatcaagcc	tctctccata	ttgcttactt
4 Human											
5 Catfish	aggcgagtc-	-tg-----a	atacagggtc	ttacagtgct	gtaaca----	---tttaacc	ccatgttg--	----tctcg-	-gat--acct	tttaaatata	taatctacac
6 Bream	-----	-----	-----atct	t--attgct	gga-----	----t----t	acataa---a	aagttcacct	-----gcc	-----ccaca	ttcctta---
7 Pig_mRNA	-----	-----a	aaa-----	-----	-----	-----	-----	-----	-----	-----	-----
	4960	4970	4980	4990	5000	5010	5020	5030	5040	5050	5060
1 Cattle	----aaaatg	ttatt-----	gactcc-caa	aatgatgtta	ttttgtataa	tcttaaat--	-accaata--	attaccagggt	--ctattttg	gt-ttttagtg	taggataaaa
2 Cattle2	----aaaatg	ttatt-----	gactcc-caa	aatgatgtta	ttttgtataa	tcttaaat--	-accaata--	attaccagggt	--ctattttg	gt-ttttagtg	taggataaaa
3 Chicken	ttggaaggag	cttttccagt	ggctggacaa	tgtgcagccc	tgaaggtgcg	tcttgaagg	aagcaacctg	agtagtgggt	agctggactg	ttatttactg	ctg-aggcaa
4 Human											
5 Catfish	ctg-----	-ttttctatt	cgctgaataa	t---tctcc	tcttgg--c	tctccc---	--cctctctc	ctt-----t	agccaacccc	gacgttcaag	tcgacacaaa
6 Bream	----aagtag	----tc----	-----	tgtg-----	tgactgtgc-	-----	aa--atcag	agta-----	-----	--attgctg	cac-acaca-
7 Pig_mRNA	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5070	5080	5090	5100	5110	5120	5130	5140	5150	5160	5170
1 Cattle	aagaatgtgt	tcttttttct	aggtagcatt	ttaatgatca	aagttgggtga	cgtagacagag	gtcttaagta	-ttattaaa-	cagatgatta	ataag-----	-atgtattcc
2 Cattle2	aagaatgtgt	tcttttttct	aggtagcatt	ttaatgatca	aagttgggtga	cgtagacagag	gtcttaagta	-ttattaaa-	cagatgatta	ataag-----	-atgtattcc
3 Chicken	cagcttg-gt	cagtgccaaa	caggaacact	gtgctga-ca	ttgacatgga	gcagaaggaa	aatttgggaa	gttattcaat	cttgtgatta	caaaggttac	catttcttcc
4 Human											
5 Catfish	accgaagtgc	tgtttttct	cctt--cagc	ccgaagatcc	aagc---ga	gcgc-catcg	taagggcgca	gctct-----	-----	---gggtgc	acttgcgccc
6 Bream	ca-----	ca---caca	ca---cac-	-----a-ca	tacaca----	-cacacacac	acactgc---	--tat-caat	-----ga	caaa-----	-----
7 Pig_mRNA	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5180	5190	5200	5210	5220	5230	5240	5250	5260	5270	5280
1 Cattle	t---cagact	tt---tccat	ataaa-----	-----agg	aaaaatgt--	ctcaaatcca	tg---aa---	aagattg-gt	acaggagg--	-----aggat	tag-caaat-
2 Cattle2	t---cagact	tt---tccat	ataaa-----	-----agg	aaaaatgt--	ctcaaatcca	tg---aa---	aagattg-gt	acaggagg--	-----aggat	tag-caaat-
3 Chicken	tattctcaat	taaggtctgt	gcaaagacac	cgtcagaagg	aagcatgtgg	ctcagagatc	tgcccaatct	actattctgg	ccacaaggct	ctctcagcag	tccacatctc
4 Human											
5 Catfish	gg--cgga--	tgagg-cgac	a-----ac	ggtgttcttg	cag-atatcg	c--gactca	tgcca-tca	aaga--cggg	--agaaggca	cgta--gaa	t--acgt-tc
6 Bream	-----cact	ta---tc---	-----acac	-----	-----gg	ctcaga----	tgc-----	-----tgg	c-accgggct	ct-----	-----
7 Pig_mRNA	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----