

# Class IA

B23

	.....	730.	.....	740.	.....	750.	.....	760.	.....	770.	.....	780
Human	GAGGAGGCCC	CAACCGCTGG	GAGCACGTGG	TTGCCACGTG	GTTGGGGGA	GGGAGGGGG						
Mouse	GAAGGGGCAG	CAACCCCTAG	GAGCACGTGG	TTGCCACGTG	GTTGGGGGTT	AGGGAGGGGG						
Rat	-GAGGGGCCG	CAACCCCTAG	GAGCACGTGG	TTGCCACGTG	GTTGGGGGTT	AGGGAGGGGG						

CAD

	.....	220.	.....	230.	.....	240.	.....	250.	.....	260.	.....	270
Human	TCCAGCGCCC	CGCGCCGTTA	GCCACGTGGA	CCGACTCCGG	CGCGCCGTCC	TCACGTGGTT						
Mouse	TCCAGCGCCC	CGCGCAGCGA	GCCACGTGGA	CCAACTCCGG	CGCGCGGTGT	TCGCTTGGTT						
Rat	TCCAGCGCCC	CGCGCAGCGA	GCCACGTGGA	CCAACTCCGG	CGCGCGGTGT	TTGCTTGGTT						

CDK4

	.....	140.	.....	150.	.....	160.	.....	170.	.....	180
Human	CCAGTCAAGT	GCCACACAGC	GTAGCCACAC	CTCTGCTCCT	CAGAGCAATG					
Mouse	CCAGTCAAGT	GCCACACAGC	GTAAACACAC	CTCTGCTTCC	CAGCGCAAG					
Rat	CCGGTCAAGT	GCCACACAGC	GTAAACACAC	CTCTGCTTCT	CAGCGCAAG					

	.....	190.	.....	200.	.....	210.	.....	220.	.....	230
Human	TCAAGCGGT	ACGTGTTGATA	GCAACAGAT	ACGTGGCTGC	CATCGCCCT					
Mouse	TCAAGGGGT	ACGTGGATA	GCAACAGGT	ACGTGGCTGC	CAGGGCC					
Rat	TAAAGGGGT	ACGTGGATA	GCAACAGGT	ACGTGGCAGT	ACAAGTC					

Cyclin D2

	.....	10.	.....	20.	.....	30.	.....	40.	.....	50.
Human	TTGACTCAAG	CATGCGTTAG	AGCACATGTC	AGGGCCGACC	GTGCTGGCGG	C				
Mouse	TTGACCACAG	GATGCTTTAG	AGCACATGTC	AGAGCCGACC	CCAAAATCCT	G				
Rat	TTGACCACAG	GATGCTTTAA	AGCACATGTC	AGAGCCGACC	C-AAAATCCA	G				

	.....	10.	.....	20.	.....	30.	.....	40.	.....	50.
Human	CTCGAGCCAC	GCCATGCCC	CTGCACATGTC	CAGCTTGGCC	AGCACATCAG	G				
Mouse	-GCAACCCAC	GCCATGCTAT	CTGCACATGTC	CAGCGTGGCC	ACCATGCGGG	G				
Rat	-TCACGCCAT	GCTATCTGCA	CTGCACATGTC	CAGCGTGGCC	ACCATGCGGG	G				

## ID2

	340	350	360	370	380	390
Human	GGAGAGGCGT	CATGGGGCGC	ATAGCTGTCA	CGTGACGGTC	AGAGACTGCT	GGCCCCACCA
Mouse	AGAGAGAAGC	CCTGGGGCAC	ATGGCTGTCA	CGTGGAGGTC	AGAGACCGCC	TGGCCCCACCA
Rat	AGAGAGAAGC	CCTGGGGCAC	ATGGCTGTCA	CGTGGAGGTC	AGAGACTGCC	TGGCCCCACCA

## LDH-A

	290	300	310	320	330
Human	CACCTTACTT	AGAC-TCCA	GCACACGTGG	AGCAGTCTGC	CGGTCCGGTTG
Mouse	CCTTTCTTTG	GGGTGTCGCA	GCAACACGTGG	AGCCA-CTCT	TGCAGGGACA
Rat	CCATTCTTAG	AGGTGTCGCA	GCAACATGTGG	AGCCA-CCCT	TACAGAGCCA

  

	390	400	410	420	430
Human	ATCC-ACC	CCAGCCGACT	CAACACGTGG	TTC	CCGCACG
Mouse	GCCC-GCCC	CGGCCAGCC	TAAACACGTGG	TTC	CCGCACG
Rat	GCCC-GCCC	TAGCCAGCC	TAAACACGTGG	TTC	CCGCACG

## MNT

	70	80	90	100	110	120
Human	GACGTGGACGGGCTC	CGCCCCGAC	CACGTGCACC	GGGGACTCTC	CTGCTGGGA	CGGCG
Mouse	GACGTAGTCAGGCC	CGCCCCGAC	CACGTGCACG	GGGGACTCTC	CCGCTGGGA	CTGTG

## PTMa

	60	70	80	90	100	110
Human	AGGGACGCAC	TCGGCGGCC	CGGGCACAGT	GCTCCCTGCG	CGCGGTGCGT	GCC-GAGGCC
Mouse	CAGGGCGCAC	TTGGCG-CCC	CGGGCACAGT	GCTCTTTGCG	CGCGGTGCGT	GCAAGAGGCT
Rat	CAGGGCGCAC	TTGGCG-CCC	CAGGGCACAGT	GCTCGTTGCG	CGCGATGCGT	GCC-GAGGCT

# Class IB

## ODC

	.....	70	.....	80	.....	90	.....	100	.....	110	.....	120
Human	CACGTG	GTGC	G-G-CGCG	-C	CTCGCG	CGGC	CTGC	GGAGA	CACGTG	GTTCG	CCGAG	CGGC
Mouse	CACGTG	TTCGC	GAGGCC	CGGA	CTGT	CGGCGC	CGGCA	GGGGA	CACGTG	GCCCG	GGGAC	CGGTG
Rat	CACGTG	TTCGC	GAGGCC	CGGA	CTGCG	GTTCGC	CGGCA	GGGGA	CACGTG	GCCCG	GAGGCT	TGGTG

## NM23B

	.....	560	.....	570	.....	580	.....	590	.....	600	.....	610
Human	TTTGGGG	TTTG	GAGCGG	CTGG	TACGTG	GGCT	GGCCC	CGGCG	GGTGC	CGCGG	GCGTT	GGGTC
Mouse	TTCCCC	-CGG	ACGTGG	TGTG	TACGTG	GGTG	GGGAGG	C-T	GGTTCC	CGGA	GACGTG	CTG
Rat	TTCCCC	-CGG	ACGTGG	TGTG	TACGTG	GGTG	GGGAGG	C-T	GGTTCC	CGA	GACGTG	CTG

	1	.....	10	.....	20	.....	30	.....	40	.....	50	.....	60
Human	GCGGGG	CGGA	AGCGG	CCGG	AAGC	CACGTG	TCCC	CGCGG	CGCG	CGTGG	TGGGG	AGGAG	
Mouse	GCGGGG	CGA	AGTAT	CTGGA	AAGC	CACGTG	TCCTC	-	-	CGCAG	CGCGG	CGGTG	
Rat	GTGGGG	CGA	AATAT	CTGGA	AAGC	CACGTG	TCCTC	-	-	CGCAG	CGCGG	CGGTG	

## Nucleolin

	.....	70	.....	80	.....	90	.....	100	.....
Human	AGCTGGG	-A	CTCGA	CTCCT	GACG	CACGTG	CCCG	GGAG	CGG
Mouse	CCCGGGG	-C	CCCGC	CTCCC	CGCG	CACGTG	CTCT	GGTGC	CGG
Rat	CTCGGGG	GC	CCCGC	CTCCC	GGCG	CACGTG	CTC	GGTGC	CGG

	.....	110	.....	120	.....	130	.....	140	.....	150				
Human	TGC	CA	CGTGG	GGCC	GGC	G	-	-	CCGC	GTGG	GTCTCTG	G	AATCTC	-
Mouse	CGC	CA	CGTGG	CTCT	GGC	GGAG	GC	CCGC	ACGTG	TCGCG	CGAC	CCCG	GGG	
Rat	CGC	CA	CGTGG	GT	TAC	GGC	GC	CCGC	ACGTG	TCGCG	CG	TCCG	AGG	

## Prohibitin

	.....	1780	.....	1790	.....	1800	.....	1810	.....	1820		
Human	TCTTAG	CCCTC	TGT	ACAGG	GAT	AGGC	CACGTG	CC	ATTTAG	CCCC	AGAAA	ACTAC
Mouse	GAACCA	CCCTC	CTT	GAGGA	AAT	AGGC	CACGTG	CC	ATATAT	TACC	AAGGA	ACTAC
Rat	-	-	-	GACT	CGGC	CACGTG	CC	ATATAT	TACC	AAGGC	ACTAC	

## SHMT1

	.....	70	.....	80	.....	90	.....	100	.....	110	.....	120		
Human	GGACCG	GGG	CGCC	CACGTG	GGCT	TCCG	GGG	GC	AGCCT	GGCC	CGGG	CCCTGA		
Mouse	GCA	-	GG	AACC	CACGTG	GCTT	CC	TG	GGCC	GGCTT	GGT	CGCCG	GCCT	CATCGA
Rat	GCA	-	GG	AACC	CACGTG	GCTT	CC	TG	GGCC	GGCTAG	GGT	CGTCCG	GCCT	CATCGA

## SHMT2

	.....	250	.....	260	.....	270	.....	280	.....	290	.....	300
Human	TGGG	GTTCTC	TTGG	CTTT	CCATG	CACGTG	GATT	GGGG	CCTCAG	GGAG	CGGACG	TGTAAC
Mouse	TGGG	GTTCTC	CTGG	CTCCT	TGCTG	CACGTG	TCT	GGGG	CCTCG	GGAA	CAGATG	CTTAAC

## Class II

### Cyclin B1

	.....	20	.....	30	.....	40	.....	50	.....	60	.....	70
Human	CGCAGGCGCA	GAGGCAGACC	ACGTG	A	GAGAGC	CTGGCCAGGC	CTTCCG	GCCT	AGCCTCACTG			
Mouse	CGCAGGCATA	GAGCCTGACC	TCGCGAGGG	TGG	GCGGTGC	TGCCAGCGGC	AGCCTCGCTC					

### JP01

	.....	430	.....	440	.....	450	.....	460	.....	470	.....	480	
Human	GCAGCGCTGG	AAAGCCCTAG	G	CACGTG	CGT	CCGC	CAA	AGGCCCGGACA	GC	GGCCGGGA			
Mouse	GC	GTTCCCGG	AA	CC	TGCG	G	CACGGGCGC	TC	ATGCTC	CA	CGTG	CGCGCG	GAGGCCTGGG

### PRDX3

	.....	40	.....	50	.....	60	.....	70	.....	80	.....	90
Human	GCCTCCCTCC	G	GGAAAGGT	T	CATGCG	CC	TGCGCAGAAC	CGCCCTTCC	CACTCCATCC			
Mouse	GCCTCCTGCG	G	CTAGAAAGG	C	CTAGCC	CC	TGCGCAGGAC	AGCCTTTACA	CTATCCCGT			