

# SEQUENCE LISTING

<110> The University of Adelaide

<120> COMPOSITIONS AND METHODS FOR MATURATION OF OOCYTES IN VITRO

<130> 1105149

<150> AU2016905096

<151> 2016-12-09

<160> 16

<170> PatentIn version 3.5

<210> 1

<211> 800

<212> DNA

<213> Homo sapiens

<400> 1

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<212> PRT

<213> Homo sapiens

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Ser Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His  
20 25 30

Val Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp  
35 40 45

Thr Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe  
50 55 60

Asp Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys  
65 70 75 80

Gln Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met  
85 90 95

Met Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser  
100 105 110

Cys Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys  
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<210> 3

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<213> Bos taurus

<400> 3

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| agaagtcgtc tctgaaaagt ttgactcca ggaaccaacg tgcctgcaga ctgcctgaa    | 240 |
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115

120

125

Phe Leu Phe Ile Ile Pro Phe Asp Cys Trp Glu Pro Ala Gln Lys  
 130 135 140

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&lt;211&gt; 829

&lt;212&gt; DNA

&lt;213&gt; Sus scrofa

&lt;400&gt; 5

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&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Sus scrofa

&lt;400&gt; 6

Met Trp Leu Gln Asn Leu Leu Leu Leu Gly Thr Val Val Cys Ser Ile  
 1 5 10 15

Ser Ala Pro Thr Arg Pro Pro Ser Pro Val Thr Arg Pro Trp Gln His

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25

30

Val Asp Ala Ile Lys Glu Ala Leu Ser Leu Leu Asn Asn Ser Asn Asp  
 35 40 45

Thr Ala Ala Val Met Asn Glu Thr Val Asp Val Val Cys Glu Met Phe  
 50 55 60

Asp Pro Gln Glu Pro Thr Cys Val Gln Thr Arg Leu Asn Leu Tyr Lys  
 65 70 75 80

Gln Gly Leu Arg Gly Ser Leu Thr Arg Leu Lys Ser Pro Leu Thr Leu  
 85 90 95

Leu Ala Lys His Tyr Glu Gln His Cys Pro Leu Thr Glu Glu Thr Ser  
 100 105 110

Cys Glu Thr Gln Ser Ile Thr Phe Lys Ser Phe Lys Asp Ser Leu Asn  
 115 120 125

Lys Phe Leu Phe Thr Ile Pro Phe Asp Cys Trp Gly Pro Val Lys Lys  
 130 135 140

&lt;210&gt; 7

&lt;211&gt; 779

&lt;212&gt; DNA

&lt;213&gt; Equus caballus

&lt;400&gt; 7

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 <212> PRT  
 <213> Equus caballus

<400> 8

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Val Asp Ala Ile Lys Glu Ala Leu Ser Leu Leu Asn Asn Ser Ser Asp  
 35 40 45

Thr Ala Ala Ile Met Asn Glu Thr Val Glu Val Val Ser Glu Thr Phe  
 50 55 60

Asp Ala Glu Glu Leu Thr Cys Leu Gln Thr Arg Leu Lys Leu Tyr Lys  
 65 70 75 80

Gln Gly Leu Arg Gly Ser Leu Ile Lys Leu Glu Gly Pro Leu Thr Met  
 85 90 95

Met Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Leu Glu Thr Ser  
 100 105 110

Cys Ala Thr Gln Met Ile Thr Phe Lys Ser Phe Lys Lys Asn Leu Lys  
 115 120 125

Asp Phe Leu Phe Glu Ile Pro Phe Asp Cys Trp Asn Gln Pro Arg Ser  
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Lys Ala Gly Leu Pro Ala Arg Ser

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 <212> PRT  
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<400> 10

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Ser Ala Pro Thr Arg Ser Pro Thr Leu Val Thr Arg Pro Ser Gln His  
 20 25 30

Val Asp Ala Ile Gln Glu Ala Leu Ser Leu Leu Asn Asn Ser Asn Asp

35

40

45

Val Thr Ala Val Met Asn Lys Ala Val Lys Val Val Ser Glu Val Phe  
 50 55 60

Asp Pro Glu Gly Pro Thr Cys Leu Glu Thr Arg Leu Gln Leu Tyr Lys  
 65 70 75 80

Glu Gly Leu Gln Gly Ser Leu Thr Ser Leu Lys Asn Pro Leu Thr Met  
 85 90 95

Met Ala Asn His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Ser Pro  
 100 105 110

Cys Ala Thr Gln Asn Ile Asn Phe Lys Ser Phe Lys Glu Asn Leu Lys  
 115 120 125

Asp Phe Leu Phe Asn Ile Pro Phe Asp Cys Trp Lys Pro Val Lys Lys  
 130 135 140

<210> 11

<211> 435

<212> DNA

<213> Felis catus

<400> 11

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agccttctga acaacagtag tgaaataact gctgtgatga atgaagcagt agaagtcgtc 180

tctgaaatgt ttgacctga ggagccgaaa tgcattgcaga ctcacctaaa gctgtacgag 240

cagggcctac ggggcagcct catcagcctc aaggagcctc tgagaatgat ggccaacat 300

tacaagcagc actgccccct tactccggaa acgccctgtg aaaccagac tatcaccttc 360

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<210> 12

<211> 144

<212> PRT

<213> Felis catus

<400> 12

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20 25 30

Val Asp Ala Ile Lys Glu Ala Leu Ser Leu Leu Asn Asn Ser Ser Glu  
35 40 45

Ile Thr Ala Val Met Asn Glu Ala Val Glu Val Val Ser Glu Met Phe  
50 55 60

Asp Pro Glu Glu Pro Lys Cys Met Gln Thr His Leu Lys Leu Tyr Glu  
65 70 75 80

Gln Gly Leu Arg Gly Ser Leu Ile Ser Leu Lys Glu Pro Leu Arg Met  
85 90 95

Met Ala Asn His Tyr Lys Gln His Cys Pro Leu Thr Pro Glu Thr Pro  
100 105 110

Cys Glu Thr Gln Thr Ile Thr Phe Lys Asn Phe Lys Glu Asn Leu Lys  
115 120 125

Asp Phe Leu Phe Asn Ile Pro Phe Asp Cys Trp Glu Pro Asp Gln Lys  
130 135 140

<210> 13

<211> 1033

<212> DNA

<213> Mus musculus

<400> 13

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| ctggcccat gtatagctga taagggccag gagattccac aactcaggta gttccccgc   | 180 |
| ccccctggag ttctgtggtc accattaatc atttcctcta actgtgtata taagagctct | 240 |
| tttgagtga gccagtgact cagagagaaa ggctaaggctc ctgaggagga tgtggctgca | 300 |

|                                                                    |      |
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| tgacatgcct gtcacgttga atgaagaggt agaagtcgtc tctaacgagt tctccttcaa  | 480  |
| gaagctaaca tgtgtgcaga cccgcctgaa gatattcgag cagggctctac ggggcaattt | 540  |
| caccaaactc aagggcgcct tgaacatgac agccagctac taccagacat actgcccccc  | 600  |
| aactccggaa acggactgtg aaacacaagt taccacctat gcggatttca tagacagcct  | 660  |
| taaaaccttt ctgactgata tcccctttga atgcaaaaaa ccaggccaaa aatgaggaag  | 720  |
| cccaggccag ctctgaatcc agcttctcag actgctgctt ttgtgcctgc gtaatgagcc  | 780  |
| aggaacttgg aatttctgcc ttaaagggaac caagagatgt ggcacagcca cagttggaag | 840  |
| gcagtatagc cctctgaaaa cgctgactca gcttggacag cggaagacaa acgagagata  | 900  |
| ttttctactg atagggaacca ttatatattt ttatatattt atatttttta aatatttatt | 960  |
| tattttattt tttatttttg caactctatt tattgagaat gtcttaccag aataataaat  | 1020 |
| tattaaaact ttt                                                     | 1033 |

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 <211> 141  
 <212> PRT  
 <213> Mus musculus

<400> 14

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| Met | Trp | Leu | Gln | Asn | Leu | Leu | Phe | Leu | Gly | Ile | Val | Val | Tyr | Ser | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ala | Pro | Thr | Arg | Ser | Pro | Ile | Thr | Val | Thr | Arg | Pro | Trp | Lys | His |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Glu | Ala | Ile | Lys | Glu | Ala | Leu | Asn | Leu | Leu | Asp | Asp | Met | Pro | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Leu | Asn | Glu | Glu | Val | Glu | Val | Val | Ser | Asn | Glu | Phe | Ser | Phe | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Leu | Thr | Cys | Val | Gln | Thr | Arg | Leu | Lys | Ile | Phe | Glu | Gln | Gly | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |

Arg Gly Asn Phe Thr Lys Leu Lys Gly Ala Leu Asn Met Thr Ala Ser  
85 90 95

Tyr Tyr Gln Thr Tyr Cys Pro Pro Thr Pro Glu Thr Asp Cys Glu Thr  
100 105 110

Gln Val Thr Thr Tyr Ala Asp Phe Ile Asp Ser Leu Lys Thr Phe Leu  
115 120 125

Thr Asp Ile Pro Phe Glu Cys Lys Lys Pro Gly Gln Lys  
130 135 140

<210> 15  
<211> 495  
<212> DNA  
<213> Ovis aries

<400> 15  
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<210> 16  
<211> 144  
<212> PRT  
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<400> 16

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Ser Ala Pro Thr Arg Gln Pro Ser Pro Val Thr Arg Pro Trp Gln His

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25

30

Val Asp Ala Ile Lys Glu Ala Leu Ser Leu Leu Asn Asp Ser Thr Asp  
35 40 45

Thr Ala Ala Val Met Asp Glu Thr Val Glu Val Val Ser Glu Met Phe  
50 55 60

Asp Ser Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys  
65 70 75 80

Gln Gly Leu Arg Gly Ser Leu Thr Ser Leu Thr Gly Ser Leu Thr Met  
85 90 95

Met Ala Ser His Tyr Lys Lys His Cys Pro Pro Thr Gln Glu Thr Ser  
100 105 110

Cys Glu Thr Gln Ile Ile Thr Phe Lys Ser Phe Lys Glu Asn Leu Lys  
115 120 125

Asp Phe Leu Phe Ile Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Lys  
130 135 140