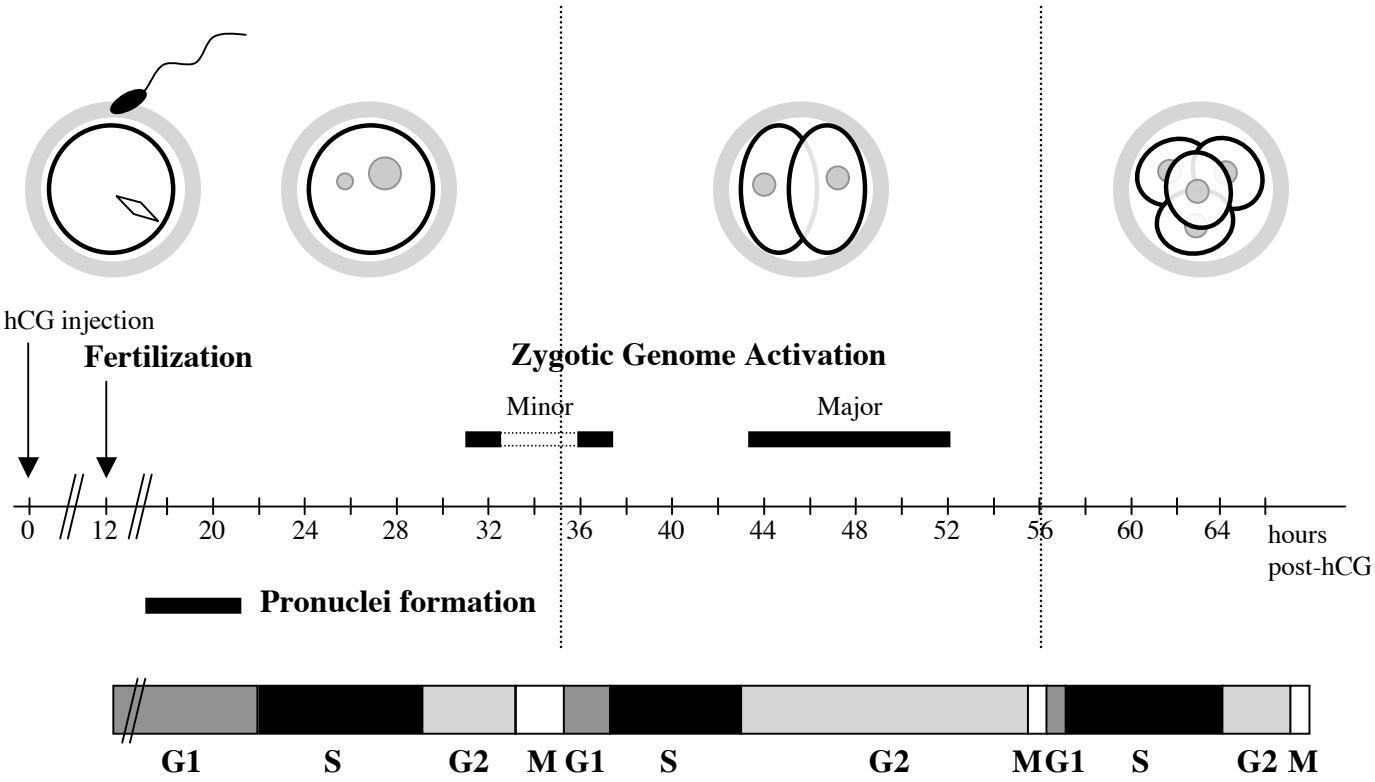
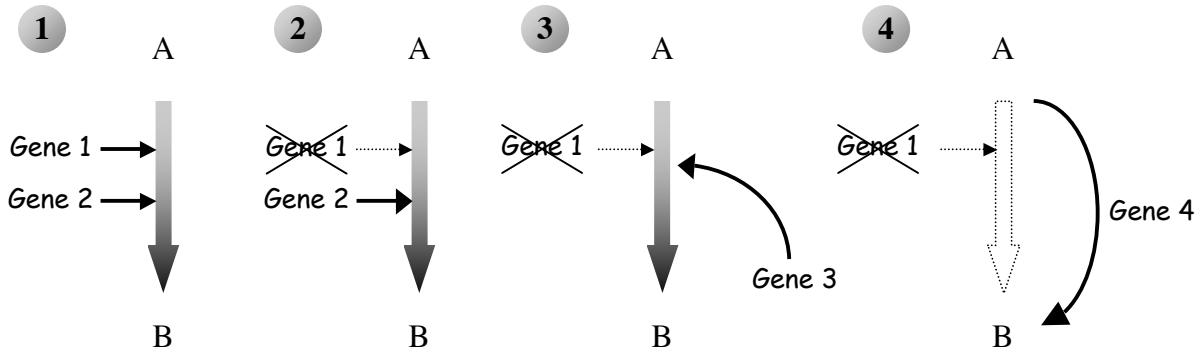
Cell cycle regulation during early mouse embryogenesis.

Jérôme Artus, Michel Cohen-Tannoudji


hCG injection
Fertilization
Zygotic Genome Activation
Minor
Major
0
12
20
24
28
32
36
40
44
48
52
56
60
64
hours
post-hCG
Pronuclei formation
G1
S
G2
M
G1
S
G2
M
G1
S
G2
M


1
A
Gene 1
Gene 2
B
2
A
Gene 1
Gene 2
B
3
A
Gene 1
Gene 3
B
4
A
Gene 1
Gene 4
B

1st division				2d division				3rd division				4th division				References
G1	S	G2	M	G1	S	G2	M	G1	S	G2	M	G1	S	G2	M	
4	4	3-5														[6]
9	6-7	5														[121]
8	4															[7]
	7-8															[122]
	4	8		0.5	7	11.5		1	7	2						[3]
	5	5		2	6	14		1	7							[3]
				1	4											[123]
				1	6	12										[10]
				1.3	6.1	15.4	1.3	1.6	7.4	0.5	1.2					[12]
								1	7	2-5		2	7	1-3		[124]
7	**5.3**	**6.5**		**1.2**	**5.8**	**13.5**		**1.1**	**7.1**	**2.9**		**2**	**7**	**3**		**Average**
19				**20**				**11**				**11**				**Total lenght**

Embryonic layer	G1	S	G2	M	Total	Reference
Ectoderm	0.25	4	0.5	1.5h	**6.25**	[24]
	1.5-2	3.5-4	<0.7	0.75h	**7-7.5**	[22]
					8.1	[23]
Mesoderm	0.7	5	0.5	1.3	**7.5**	[24]
	1.5-2	3.5-4	<0.7	0.75	**7-7.5**	[22]
					13.9	[23]
Proliferative zone	<0.5	2-2,75	<0.3	0.75	**3-3.5**	[22]
					3.6	[23]