Unactivated egg n egg 3 2.1 2.1 Animal pole Marginal zone 3 1.2 2.0 3 0.5 0.5 Vegetal pole Blastula 8.5 9 Animal pole 3 1.5 0.3 3 1.5 1.4 Marginal zone Vegetal pole 3 1.0 1.0

14

18

21

27

The number (n) of measurements is noted; in all tissues at all stages, at least three measurements were made on embryos derived from different female frogs and so are genetically independent. In most cases, embryos were derived from different males as well. The time post-fertilization (pf) is noted and corresponds to the majority of measurements (76%) made on embryos that were reared at 22°C. The remaining measurements (22%) were made on embryos reared at 18°C, except for three measurements made on one

3

3

3

3

3

3

3

3

3

3

3

3

3

3

3

3

3

3

4

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5

5

3

4

4

4

4

4

4

3

3

3

3

3

3

3

4

3

3

4

4

3

NF stage

Average Seryp- (%)

7.0

5.8

5.0

0.3

1.5

22.1

17.8

17.4

13.9

11.6

6.1

3.7

297

31.8

29.3

22.6

15.3

14.1

8.0

3.1

46.9

41.0

29.3

35.8

25.0

24.3

23.4

7.7

3.2

82.1

61.2

57.6

64.3

72.7

44.8

55.8

53.2

40.9

47.5

30.7

23.2

9.3

s.d. Seryp- (%)

3.0

3.0

1.9

0.5

0.7

1.3

1.5

4.5

3.8

3.7

3.9

3.5

4.1

6.5

3.4

2.6

0.1

3.8

1.8

2.9

9.1

8.9

10.8

6.3

6.1

6.7

10.6

5.6

1.8

11.8

13.9

6.5

5.2

19.4

4.2

14.4

19.4

11.0

4.7

10.4

9.5

Table S2. The percentage of yolk platelets lacking Seryp (Seryp) was determined in the listed

20.5 12

23

27

30

47

stage 9 embryo that was reared at 13°C. We noted no obvious effects of temperature on Seryp- (%).

tissues at seven developmental Nieuwkoop-Faber (NF) stages

Tissue

Gastrula

Dorsal lip

Neurectoderm

Archentron roof

Deep endoderm

Early neurula

Notochord

Epidermal ectoderm

Anterior neural plate

Epidermal ectoderm

Archentron roof

Deep endoderm

Prosencephalon

Archentron roof

Deep endoderm

Early tailbud

Eye anlage Prosencephalon

Epidermis

Notochord

Archentron roof

Deep endoderm

Prosencephalon

Somite

Tailbud

Eye vesicle

Otic vesicle

Epidermis

Notochord

Heart anlage

Deep endoderm

Arch endoderm epithelium

Oral endoderm epithelium

Tailbud tip

Somites

Lens placode

Cement gland

Late neurula

Notochord

Neural plate (mid-body)

Somitogenic mesoderm

Neural groove (mid-body)

Cement gland anlage

Epidermal ectoderm

Somitogenic mesoderm

Neural tube (mid-body)

Cement gland anlage

Time pf (hour)