

Über den Einfluß von Fremdelektrolyt auf die Bildung von Isopolymolybdaten

Remarks about the Formation of Na-Isopolymolybdates in Aqueous Solutions, Influenced by the Presence of NaCl

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Im Anschluß an die obige Arbeit¹ sei hier eine Beobachtung mitgeteilt, die den Einfluß eines Fremdelektrolyten auf die Bildung von Isopolymolybdaten betrifft.

Bei den Eichmessungen über den Verbrauch von Protonen durch Na₂MoO₄ in 6 gew.-proz. NaCl-Lösungen wurden auch reine wäßrige Molybdat-Lösungen auf ihren H⁺-Verbrauch hin analysiert. In beiden Fällen entsprach die zugegebene Menge HCl jeweils einer Acidifikation von 2. Dabei zeigten die Lösungen ohne NaCl-Zusatz eine deutliche Konzentrationsabhängigkeit des H⁺-Verbrauches, während die Lösungen mit Natriumchlorid einen konstanten Verbrauch aufwiesen.

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Further Investigations on Transcription in *Limnaea* (Mollusc)

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In a previous note¹ we have shown that ion-agar electrophoresis is a suitable technique for investigating transcription patterns in *Limnaea*. Specifically, it was reported that incorporation in 4S RNA is maximal in the uncleaved egg and the percentage of this fraction decreases continuously with development. Recently KNOWLAND² published data on the changing proportions of 4S RNA in course of development in *Xenopus* from blastula to tadpole. The pattern shows a distinct rise and fall and is quite different from the continuous decrease in *Limnaea*.

The present report shows that there is a precise timing in 4S RNA transcription in the uncleaved egg of *Limnaea*. A general picture of transcription of other RNA fractions is also being presented. The techniques employed were exactly the same as before¹. Plating

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¹ R. L. BRAHMACHARY, P. K. TAPASWI, and D. GHOSAL, Z. Naturforsch. 25 b, 1318 [1970].

System HCl—Na₂MoO₄—H₂O

Konzentration Na ₂ MoO ₄ [Mol l ⁻¹]	$\Delta H^{\ominus}/\text{Mo}$ [Mol Mol ⁻¹] Meßreihe 1	$\Delta H^{\ominus}/\text{Mo}$ [Mol Mol ⁻¹] Meßreihe 2
3,805 10 ⁻³	1,21	1,19
7,689	1,40	1,41
9,524	1,45	1,47
1,173 10 ⁻²	1,51	1,52
1,535		1,55

System HCl—NaCl—Na₂MoO₄—H₂O

Konzentration Na ₂ MoO ₄ [Mol l ⁻¹]	$\Delta H^{\ominus}/\text{Mo}$ [Mol Mol ⁻¹] Meßreihe 1	$\Delta H^{\ominus}/\text{Mo}$ [Mol Mol ⁻¹] Meßreihe 2
7,460 10 ⁻³	1,52	1,52
1,507 10 ⁻²	1,52	1,51
1,867	1,52	1,52
2,299	1,52	1,52

Das zugefügte NaCl scheint demnach eine stabilisierende Wirkung auf die Polymolybdatationen auszuüben.

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¹ H. P. STOCK, Z. Naturforsch. 26 b, — — [1971].

on nutrient medium of the crushed egg mass further showed a negligible bacterial population of *Limnaea* eggs, which proved that the results are not due to bacterial contamination. Freshly laid eggs cleave after 2 to 3 hours. Control pieces from the egg masses for experiment were kept under observation and so the timings of their cleavage could be determined.

Table 1 shows that there is a very marked decrease in incorporation in the 4S fraction during the last part of the uncleaved stage.

Treatment with P ³²	Experiment Nos.	Percentage or label in 4S RNA
For 1 hour during '2 hours before cleavage to 1 hour before cleavage	1	33
	2	39
	3	43
For the last 1 hour before cleavage	4	13
	5	13
For the last 35 mins. before cleavage	6	5
	7	10

Table 1. The pattern of incorporation into 4S RNA before cleavage.

² J. S. KNOWLAND, Biochim. biophysica Acta [Amsterdam] 209, 416 [1970].