

*Zygmunt SAGAN, Cecylia FELIŃSKA*

Physiology

**STUDIES ON A NEW GROUP FEATURE OF THE EEL ERYTHROCYTES – An(b)  
BADANIA NAD NOWĄ CECHĄ GRUPOWĄ ERYTROCYTÓW WĘGORZY – An(b)**

**Department of Legal Medicine – Pomeranian Academy of Medicine  
and Institute of Ichthyology**

It has been established that while absorbing certain horse sera with the An(a) eel erythrocytes, the anti An(b) sera can be obtained.

This serum agglutinates mainly the eel erythrocytes that have not been agglutinated with the anti – An(a) sera.

Our previous works (Sagan and Felińska, 1972, 1973) have shown the presence of the An(a) feature in the eel erythrocytes; the feature can be determined with agglutinins obtained when absorbing horse or pig sera as well as those of goat, sufficiently diluted. Results of investigations on the pattern of the eel erythrocyte antigen features using the horse sera are presented in the following report.

**MATERIAL AND METHODS**

The material, methods and the nomenclature adopted here are the same as those used in our previous papers. The blood of six horses was supplied by RZD-Ostoja. Twelve eels caught from the Szczecin Firth yielded their blood for the investigations.

**RESULTS**

The results obtained are summarized in the following three tables.

Table 1

The horse serum activity index against the An(a) and An(b) eel erythrocytes

Erythrocyte group	Serum No.					
	1	2	3	4	5	6
An(a)	4/19	3/16	3/18	3/10	2/4	3/16
An(b)	4/19	3/21	3/18	3/5	3/10	3/10

Table 2

The horse serum specificities after absorbing with the An(a) and An(b) eel erythrocytes

Horse serum No.	2		5		6	
	An(a)	An(b)	An(a)	An(b)	An(a)	An(b)
An(a)	-	+	±	+	+	+
An(b)	+	-	±	-	+	-

Table 3

Determination of the eel erythrocyte group features using the anti-An(a) and anti-An(b) sera

Eel erythrocytes	Sera	
	anti-An(a)	anti-An(b)
1	-	+
2	-	+
3	-	+++
4	++	-
5	+++	-
6	-	+
7	+++	-
8	++	-
9	-	+
10	+++	-
11	+++	-
12	-	+

## DISCUSSION

The results presented show that the An(b) group feature of the eel erythrocytes can be positively determined as it is done for the An(a) group feature.

The anti - An(b) agglutinins can be obtained through the absorption of certain horse sera with the An(a) erythrocytes.

## LITERATURE

- Sagan Z., Felińska C.; 1972! Preliminary studies on blood groups of eels *Anguilla anguilla* (L). Acta Ichtiol. et Pisc. II, 1:63–68.
- Sagan Z., Felińska C.; 1973: A new feature of eel erythrocytes – An(a). Acta Ichtiol. et Piscat. III, 1. str. 119–123.

## Badania nad nową cechą grupową erytrocytów węgorzy – An(b)

## Streszczenie

Cechę grupową krwinek An(b) u węgorzy można oznaczyć podobnie jak cechę grupową An(a). Aglutyniny anty-An(b) można uzyskać przez absorpcję krwinkami grupy An(a) wybranych surowic koni.

## ИССЛЕДОВАНИЯ НОВОГО ГРУППОВОГО СВОЙСТВА ЭРИТРОЦИТОВ УГРЯ

## Р е з ю м е

Групповые свойство эритроцитов An(b) у угров нужно обозначить подобно тому как групповые свойство An(a). Аглютинины анты - An(b) нужно получить через абсорбцию эритроцитами группы An(a) избранных сыворотков лошади.