

01.06.2016

## Reference values for blood cell counts of female RAG2 mice and female CB17 SCID mice

Blood samples were obtained from Taconic female RAG2 mice, 9-12 weeks old, (nomenclature: 129S6/SvEvTac-Rag2tm1Fwa). The mice were purchased from Taconic USA. <a href="http://www.taconic.com/transgenic-mouse-model/rag2-model-rag2">http://www.taconic.com/transgenic-mouse-model/rag2-model-rag2</a>

Blood was also drawn from female C.B. 17 SCID mice (8 weeks of age) purchased from Taconic Denmark. <a href="http://www.taconic.com/mouse-model/cb17-scid">http://www.taconic.com/mouse-model/cb17-scid</a>

Reference values calculated from base line blood cell counts of 39 female RAG2 mice													
	90%CL for lower limit		90% CL for upper limit		Mean	SD	Range	N					
WBC	0,5	1,1	2,5	3,1	1,8	0,5	0,8-2,8	39					
RBC	8,9	9,6	11,8	12,4	10,7	0,7	9,2-12,1	39					
THR	213	303	472	567	396	64	257-518	39					

## Reference values calculated from base line blood cell counts of 109 female CB17 SCID mice

	90%CL for lower limit		90% CL for upper limit		Mean	SD	Range	N
WBC	1,6	1,7	3,9	4,8	2,7	0,7	1,6-4,4	109
RBC	9,3	9,9	11,4	11,9	10,7	0,5	9,6-11,5	109
THR	318	525	896	970	703	117	452 -963	109

Reference intervals are presented with 90% confidence intervals for upper and lower limits. White blood cell counts (WBC  $X10^9/L$ ), Red blood cell counts (RBC  $X10^{12}/L$ ) and platelet counts (THR  $X10^9/L$ ).

Reference interval in **green** indicate that the reference interval is in agreement with IFCC-CLSI C28-A3 recommendations as described in Geffré et al., 2011<sup>(1)</sup>. Reference interval in **orange** indicates that the reference interval should be used with caution because possible outliers were detected.

Blood samples (no more than 10% of total volume) were collected into a 100µl EDTA-coated tubes, Microvette ®100 K3E from Sarsted from v.facialis. The tubes were

turned/swirled for about 60 seconds to ensure all EDTA is mixed well with the blood. Good punctures must be ensured, in order to obtain representative samples. Only fresh, running blood was collected. Analysis was performed as soon as possible after blood collection, always on the same day. If samples needed to be stored for more than a couple of hours, they were stored in a fridge (4°C).

Hematology analysis was carried out on a automated hematology analyser, MS4 analyser from Melet Schloeing Laboratories, France.

The reference interval was calculated as described in Geffré et al.

1.) Geffré A, Concordet D, Braun JP, Trumel C. Reference Value Advisor: a new freeware set of macroinstructions to calculate reference intervals with Microsoft Excel. Vet Clin Pathol 40/1 (2011).

Kind regards Bergthora Eiríksdóttir, DVM ArcticLAS Iceland