



Title	A FUNDAMENTAL STUDY OF ALPHA-NAPHTYL ACETATE ESTERASE STAINING IN EQUINE PERIPHERAL BLOOD LYMPHOCYTES
Author(s)	NONAKA, Michio
Citation	Japanese Journal of Veterinary Research, 34(2), 146-146
Issue Date	1986-04-30
Doc URL	http://hdl.handle.net/2115/2993
Type	bulletin (article)
File Information	KJ00002374400.pdf



[Instructions for use](#)

A FUNDAMENTAL STUDY OF ALPHA-NAPHTYL ACETATE ESTERASE
STAINING IN EQUINE PERIPHERAL BLOOD LYMPHOCYTES

Michio NONAKA

*Department of Veterinary Surgery
Faculty of Veterinary Medicine
Hokkaido University, Sapporo 060, Japan*

Alpha-naphthyl acetate esterase (ANAE) staining was investigated in equine peripheral blood lymphocytes.

The results are summarized as follows :

1. The optimal staining conditions of equine peripheral blood lymphocytes for ANAE were 4°C, 19 hours, pH 6.0–6.5.
2. The ANAE positive percent was retained even when slides were kept at room temperature for 24 hours before fixation or for 1 month after fixation.
3. The ANAE positive percent varied when equine peripheral blood was stored at 4°C and anticoagulated with EDTA-2Na, Heparin-Na, Citrate-Na and ACD-A solution. The best results were obtained with Heparin-Na; in this case, a positive percent was retained for 8 hours.
4. The ANAE positive percent remained unchanged throughout the day.
5. The percent and absolute number of ANAE positive lymphocytes of a normal thoroughbred were, respectively, 43.2% and $1.8 \times 10^6/\text{ml}$, and there were no significant differences among males, geldings and females.
6. The ANAE positive percent of nylon fiber nonadherent lymphocytes was $87.6 \pm 10.0\%$, while that of adherent lymphocytes was $31.7 \pm 10.9\%$.