

Journal of Andrology, Vol 12, Issue 2 140-147, Copyright © 1991 by The American Society of Andrology

---

## JOURNAL ARTICLE

# Stage-specific expression of a protein of the acrosome of baboon sperm during spermiogenesis detected with a monoclonal antibody

M. A. Isahakia

Institute of Primate Research, National Museums of Kenya, Karen Nairobi.

A single monoclonal antibody, BSA4, raised against baboon epididymal sperm was used to study the ontogeny of the baboon sperm acrosome region during testicular spermiogenesis. This antibody is not species-specific but is restricted to the acrosome region in all other sperm examined (human, rat, and mouse). In the baboon, treatment of epididymal sperm with 0.05% Triton-X results in complete loss of anterior acrosome staining. Such treated sperm display a distinct equatorial staining. Antibody BSA4 reacts with a determinant (molecular weight, 43,000 d) that first appears in postmeiotic round spermatids during spermiogenesis. When tested for an effect on the fertilization process in vitro, the antibody BSA4 displayed significant inhibition, indicating a possible functional role for the determinant on mouse sperm. Using the avidin-biotin immunoperoxidase method, several stages of acrosome development were recognized: ie, cap, acrosome, and maturation stages of spermiogenesis. The antibody staining was restricted to the developing acrosome at all stages, indicating that the equatorial region is part of the acrosome and is expressed with temporal specificity during spermatogenesis in the baboon.

### This Article

- ▶ [Full Text \(PDF\)](#)
- ▶ [Alert me when this article is cited](#)
- ▶ [Alert me if a correction is posted](#)

### Services

- ▶ [Similar articles in this journal](#)
- ▶ [Similar articles in PubMed](#)
- ▶ [Alert me to new issues of the journal](#)
- ▶ [Download to citation manager](#)

### Citing Articles

- ▶ [Citing Articles via Google Scholar](#)

### Google Scholar

- ▶ [Articles by Isahakia, M. A.](#)
- ▶ [Search for Related Content](#)

### PubMed

- ▶ [PubMed Citation](#)
- ▶ [Articles by Isahakia, M. A.](#)