

Transgenic Mice Carrying P30 Gene Encoding A Major Surface Antigen of *Toxoplasma gondii*

S. SEYHA, Y. MAKI, M. YOKOYAMA*, N. INOUE, X. XUAN, I. IGARASHI, H. NAGASAWA, A. SAITO**, K. FUJISAKI, T. MIKAMI, N. SUZUKI and Y. TOYODA

Research Center for Protozoan Molecular Immunology, Obihiro University of
Agriculture and Veterinary Medicine, Hokkaido, Japan
*Reproductive Engineering Section and Experimental Animal Center,
Mitsubishi Kasei Institute of Life Sciences, Tokyo, Japan
**Department of Veterinary Physiology, Obihiro University of Agriculture and
Veterinary Medicine, Hokkaido, Japan

The major surface antigen, SAG-1 (P30), representing 3-5% of total protein of *T. gondii*, is immunodominant, and appears to have an important role in binding to the host cell in the process of invasion, pathogenesis and immunogenicity of the parasite. Our work is aimed at the studies of immunological aspects of transgenic mice expressing P30 gene in *T. gondii* infection.

P30 gene was cloned from the cDNA obtained by RT-PCR amplification of *T. gondii* mRNA according to the published sequence of the gene (Maki et al. 1996). A 3.3 kb DNA fragment carrying a promoter ligated with P30 gene encoding the major surface antigen was microinjected into one of pronuclei of fertilized eggs of C57BL/6j, BALB/c (Seng et al. 1996) and B6C3F1 mice, and then the eggs were transferred to 0.5 day pseudopregnant mice.

Of 331 weaned pups were screened by PCR 36 founders were obtained. Full length

of mRNA-P30 was identified. Expression of P30 product was found in thymus, spleen, brain and liver, as determined by Western blot. F1, F2 and F3 progenies inherited the transgene.

Subsequent analyses of the transgene and studies on immunological aspects of the transgenic mice in *T. gondii* infection are being carried out.

REFERENCES

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