

## Abstract

**Project Code:** PDF/30/2540

**Project Title:** Analysis of Transporter associated with antigen processing (TAP) gene in Thai population and its association with Rheumatoid Arthritis

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**Project Period:** 2 years (1 August 1997-31 July 1999)

### Objectives:

- 1.To study the allele frequencies of TAP1 and TAP2 genes in the normal Thai population.
- 2.To study linkage disequilibrium between TAP and HLA genes
- 3.To study the association of TAP1 and TAP2 genes with Thai rheumatoid arthritis

### Methodology:

Study population: 50-100 rheumatoid arthritis patients and 100 unrelated normal individuals

Method: TAP1 and TAP2 were typed by ARMS-PCR

Statistical analysis: Chi-square test with yates correction

**Results:** In the normal population, TAP1 presents 4 alleles: TAP1A, 1B, 1C and 1D and TAP2 presents 5 alleles: TAP2A, 2B, 2C, 2D and 2E. The antigen frequencies of TAP1 and TAP2 genes are similar to those found in other populations. Comparison of TAP1 and TAP2 allele frequencies between the patients and normal controls showed no significant differences.

**Discussion and Conclusion:** TAP1 and TAP2 genes do not confer susceptibility to rheumatoid arthritis in Thai population.

**Suggestions:** It should be the HLA genes that primarily associated with rheumatoid arthritis.

**Keywords:** TAP, rheumatoid arthritis