

## Amino Acid chirality Breaking by N-Phosphorylation

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The chirality breaking of amino acid is a focus issue in the origin of life. For chemists, there are some interesting chemical approaches to solve the symmetry breaking problem[1,2]. Our previous experiments indicated that when amino acids were phosphorylated, there were many bio-mimic reactions happened[3]. In this paper, it was found that there had significant difference between the N-phosphoryl L- and D- amino acids such as serine and threonine. The optical rotation tracing experiments of the racemic N-phosphoamino acids also showed the similar results. The chirality breaking of amino acids by N-phosphorylation was an novel phenomena.

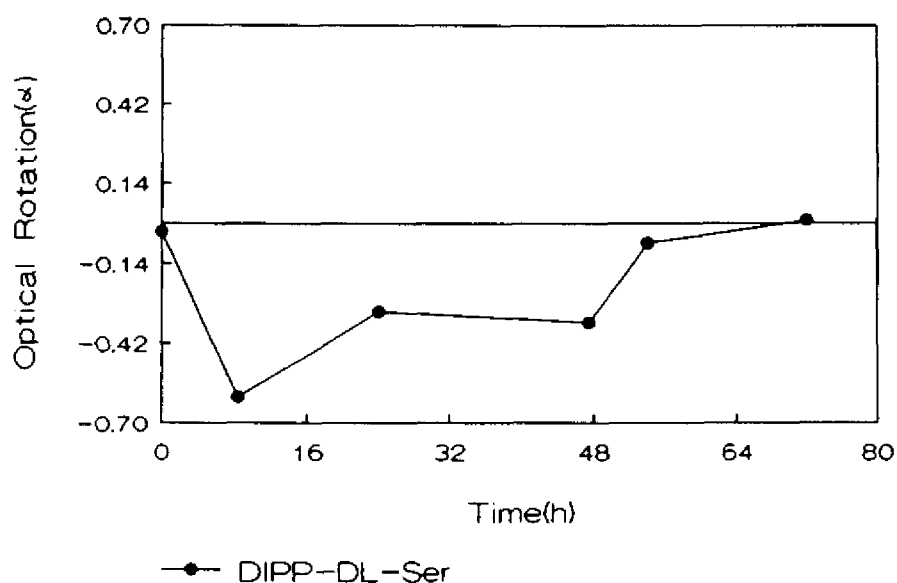


Figure 1

### References:

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2. T. Tukahara and S. Tuasa, *ibid*, 1991, 32, 304.
4. Y.F. Zhao and P.S. Cao, "Phosphoryl amino acids: common origin for nucleic acids and proteins", *Conf. on the Structure and Model of the First Cell. Italy*, 1994.