

The Kinetics of the Growth of an Accidentally Created Chiral Biomolecule in the Racemic Prebiotic Medium

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ABSTRACT

A mathematical model is presented to show that a chiral (e.g. L) isomer of a self-replicating biomolecule, created accidentally in the prebiotic medium, could grow rapidly, consuming nearly all L and D forms of nutrients in the medium. A high chiral selectivity is reached in a time comparable to the racemization time of the nutrient species, whose L and D enantiomers were present in equal concentrations at the beginning.
