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# Citation for Chemical Breakthroughs

Demonstration of asymmetric induction in an enzymatically-catalyzed reaction.

*J. Biol. Chem.* 1953, 202, 687–697.

## THE ENZYMATIC TRANSFER OF HYDROGEN*

### I. THE REACTION CATALYZED BY ALCOHOL DEHYDROGENASE

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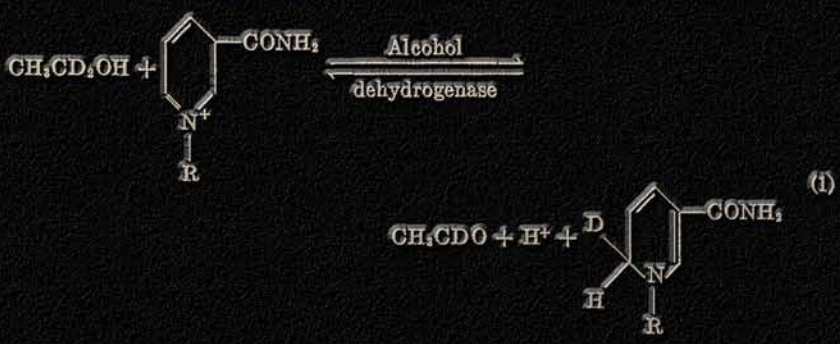
In preliminary communications (1, 2) the authors have reported that the reaction catalyzed by yeast alcohol dehydrogenase involves a direct transfer of hydrogen from ethanol to diphosphopyridine nucleotide (DPN). The essential experiments were performed with 1,1-dideuteroethanol, with which it was shown that the reaction proceeds according to Equation 1.




The present paper discusses the details of the tracer experiments, and the stereochemistry of the monodeutero reduced DPN.



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