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Tiele	
Title	Autooxidation of alkylhydrazones and mutagenicity of the resulting hydroperoxides
Sub Title	
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Publisher	共立薬科大学
Publication year	1993
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of
	Pharmacy). No.38 (1993.) ,p.71- 71
Abstract	
Notes	抄録
Genre	Technical Report
URL	http://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000038 -0071

Autooxidation of Alkylhydrazones and Mutagenicity of the Resulting Hydroperoxides*

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Acetone alkylhydrazones were readily autooxidized to 2-alkylazo-2-propyl hydroperoxides, which were directly mutagenic in *Salmonella typhimurium* TA 1535, TA 100, TA 102 and *Escherichia coli* WP2*hcr*⁻. The mechanism of this mutagenicity presumes that the hydroperoxides in aqueous solution decompose to alkyl diazonium ions which were observed in the alkylation of 4-(p-nitrobenzyl)pyridine, and also to hydroxyl radical which was detected by ESR.

^{*} 本報告は Biol. Pharm. Bull., 16 (1), 96-98 (1993) に発表。