

Title	Changes in lens proteins induced at the early stage of cataractogenesis in cac (Nakano) mice
Sub Title	
Author	小林, 静子(Kobayashi, Shizuko) 粕谷, 美南子(Kasuya, Minako) 糸井, 素一(Itoi, Motokazu)
Publisher	共立薬科大学
Publication year	1989
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of Pharmacy). No.34 (1989.) ,p.77- 77
JaLC DOI	
Abstract	
Notes	抄録
Genre	Technical Report
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000034-0077

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

Changes in Lens Proteins Induced at the Early Stage of Cataratogenesis in *cac* (Nakano) Mice*

Shizuko KOBAYASHI, Minako KASUYA** and Motokazu ITOI***

小林静子, 粕谷美南子**, 糸井素一***

As we were interested in the relationship between the changes of lens proteins and the Na^+ and K^+ levels, those changes in lens of *cac* (Nakano) mice at around the stage of appearance of the "pin-head" opacity were analyzed by two-dimensional electrophoresis (2D-PAGE).

The 2D-PAGE profile of lens proteins in 21-day-old *cac* mice differed from that in 27-day-old normal mice, even though the appearance of "pin-head" nuclear opacity (26-day-old) had not yet been observed in the lenses. Especially noticeable were great differences in the polypeptides associated with the α - and β -crystallin subfractions, the appearances of which corresponded to an increase in a ratio of the amounts of Na^+ to that of K^+ in the lenses of defective mice. No dramatic decrease in the γ -crystallin fraction was observed until the mature cataract stage.

* 本報告は *Exp. Eye Res.* (1989) 49, 553—559 に発表.

** 白内障研究所

*** 京都府立医大眼科