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면역조직화학 및 SEM-EDS를 이용한

남극 큰따조개의 조직내 중금속 축적위치파악에 관한 연구

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= Abstract =

A Study on the Accumulation of Heavy Metals in the Tissue of  
the Antarctic Clam *Laternula elliptica*.

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The present study on the *Laternula elliptica* concern the functional morphology of the kidney, digestive gland and gill which contain highly accumulated heavy metals, particularly to their epithelial cells as sites of metal storage.

The immunohistochemical and SEM-EDS methods were undertaken in order to find out the localization of metallothionein and the aspect of the accumulated heavy metals in the kidney, digestive gland and gills of *Laternula elliptica*.

The result of immunohistochemical study showed that intense metallothionein immunostaining reaction was found in the epithelial cells of each of the organs of the *Laternula elliptica*. And, the result of SEM-EDS methods showed that all of the organs contain heavymetals such as Cr, Cd, Cu and so forth.