

ラット肝細胞におけるカテプシンDの局在部位 (免疫細胞化学的研究)

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Localization of cathepsin D in rat liver Immunocytochemical study using post-embedding immunoenzyme and protein A-gold techniques

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ABSTRACT Light and electron microscopic localization of cathepsin D in rat liver was investigated by post-embedding immunoenzyme and protein A-gold techniques. By light microscopy, cytoplasmic granules of parenchymal cells and Kupffer cells were stained for cathepsin D. Weak staining was also noted in sinusoidal endothelial cells. In the parenchymal cells many of positive granules located around bile canaliculi. In the Kupffer cells and the endothelial cells, diffuse staining was noted in the cytoplasm in addition to granular staining. By electron microscopy, gold particles representing the antigenic sites for cathepsin D were seen in typical secondary lysosomes and some multivesicular bodies of the parenchymal cells and Kupffer cells. The lysosomes of the endothelial cells and fat-storing cells were weakly labeled. Quantitative analysis of the labeling density in the lysosomes of these three types of cells demonstrated that the lysosomes of parenchymal cells and Kupffer cells are main containers of cathepsin D in rat liver. The results suggest that cathepsin D functions in the intracellular digestive system of parenchymal cells and Kupffer cells but not so much in that of the endothelial cells.

抄録 ラット肝細胞におけるカテプシンDの局在部位について免疫細胞化学的方法を用い検討した。肝実質細胞及びクッパー細胞のリソゾームには多くのカテプシンDが見られたが、内皮細胞のリソゾームには少量しか認められなかった。この結果はカテプシンDが実質細胞及び

クッパー細胞において、細胞内蛋白質の分解に関与することを示唆している。

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