

ロバスタチンで処理した
マウスメラノーマ B 1 6 と B 1 6 F 1 0 共に細胞質に
多くメバロン酸二リン酸脱炭酸酵素が存在する

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**Mevalonate Pyrophosphate Decarboxylase is Predominantly Located
in the Cytosol of both B16 and B16F10 Cells in
Mouse Melanoma Treated with Lovastatin**

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ABSTRACT: Recently, it has been a question whether mevalonate pyrophosphate decarboxylase (MPD) is predominantly located in the peroxisomes or cytosol. We previously reported that a small amount of MPD in rat liver fed a CP diet (5% cholestyramine and 0.1% pravastatin) existed in the peroxisomes, although MPD is predominantly located in the cytosol in rat liver treated with normal chow and CP diet for 12 days. In the present study, we examined the subcellular distribution of MPD in mouse melanoma cells (B16 and B16F10) treated with or without lovastatin, using digitonin permeabilization and immunoblotting. In permeabilized B16 by digitonin after treatment with or without lovastatin, 95% and 5%, or 98% and 2% of MPD existed in the cytosol and membrane/organelle (M/O) fraction, respectively. Using B16F10 in the same conditions, 80% and 20%, or 91% and 9% of MPD existed in the cytosol and M/O fraction, respectively. These results indicated that MPD was predominantly located in the cytosol in both mouse melanoma cells treated with or without lovastatin.

抄録 近年、メバロン酸二リン酸脱炭酸酵素 (MPD) の主要な局在場所において、細胞質とペルオキシソームのどちらに多く存在しているか問題になっている。我々は以前、MPDの多くは細胞質に存在し、プラバスタチンとコレステラミンを含む餌をラットに摂取させた肝にのみ、少量のMPDがペルオキシソームに存在することを示した。今回の研究において、我々はロバスタチンで処理したB 1 6 と B 1 6 F 1 0 細胞中のMPDの細胞内分布を調査した。その結果、ロバスタチン処理未処理共に両細胞において、細胞質に多くMPDが存在することを明らかにした。