Synopsis of Original Research Paper

Elastin gene expression in the aged skin

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Tropoelastin (65kd) was found to be converted to a lower molecular weight fragment (45kd) in the cultured medium in chick smooth muscle cell culture. The conversion was found to be time-dependent by pulse-chase experiment using cell culture system. This was also confirmed by chase experiment in test tube. These results indicate that the processing of tropoelastm was mediated by a protease present in the cultured medium. In fact the conversion was specifically inhibited by 1 mM EDTA and not by NEM and PMSF. The processing of tropoelastin is of vital importance for understanding tropo-elastm metabolism.