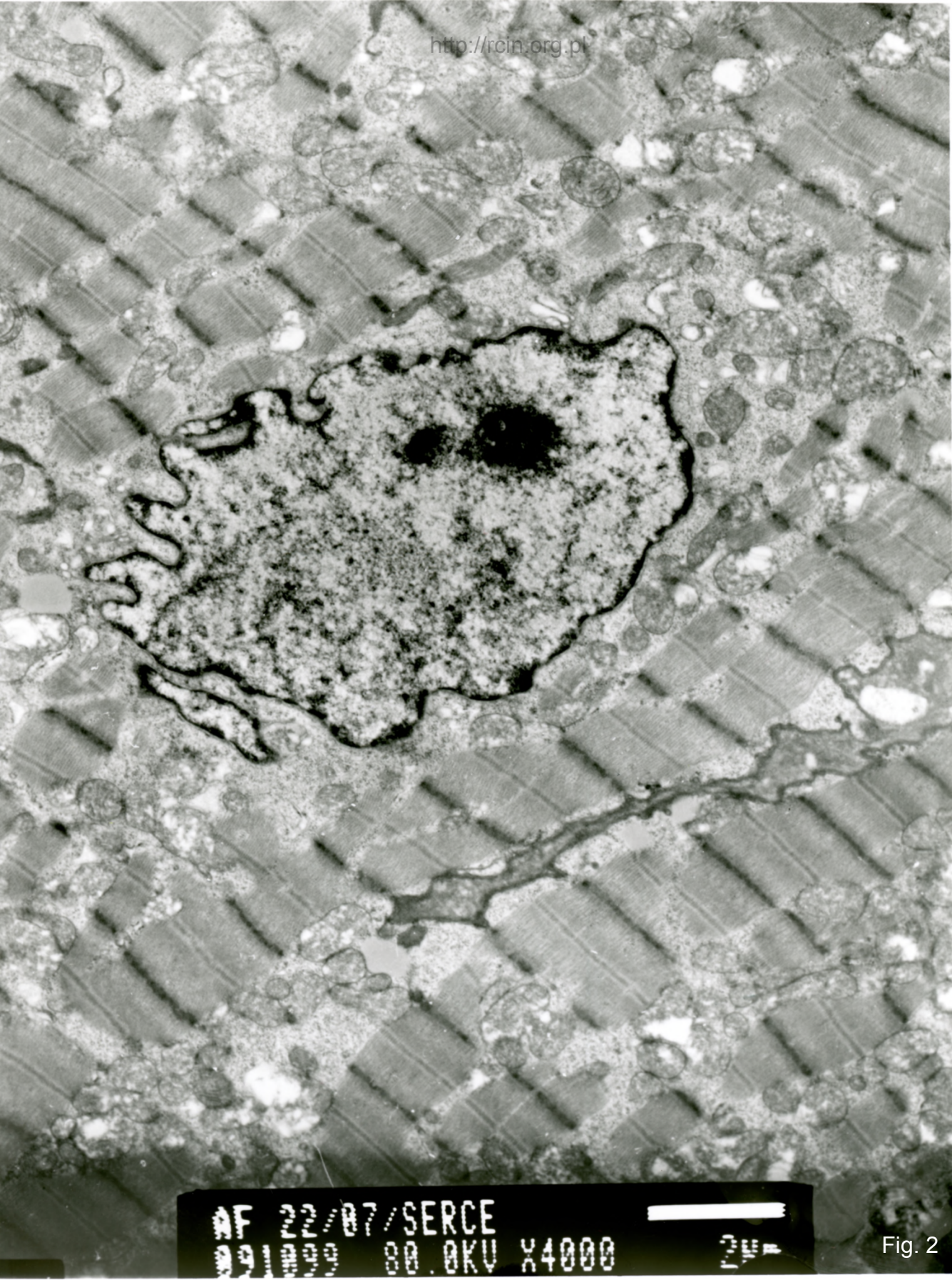




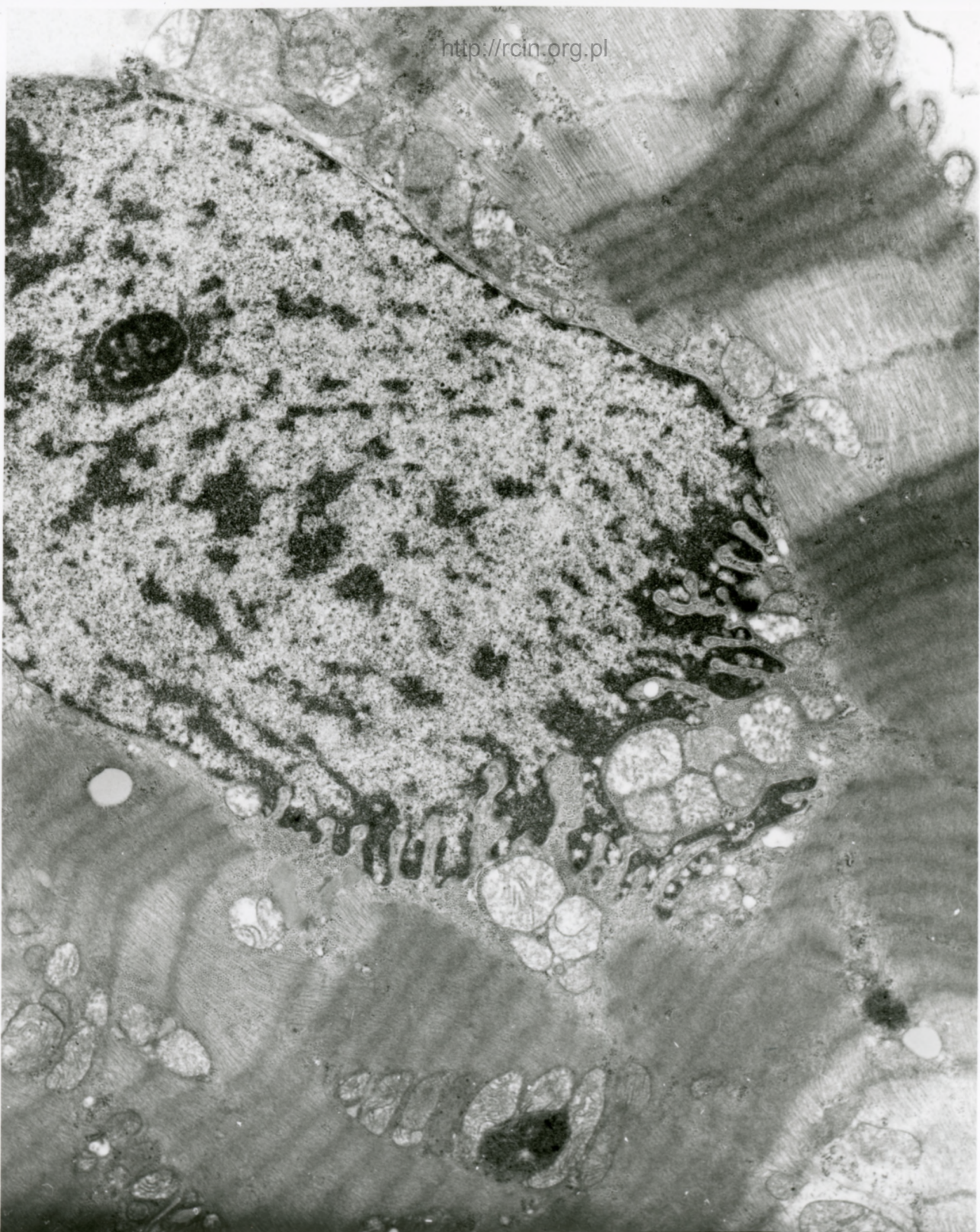
AF 22/07/SERCE
071672 88 AKU X2500

Fig. 1

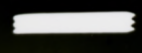


AF 22/07/SERCE
091000 80.0KV X4000 2µm

Fig. 2

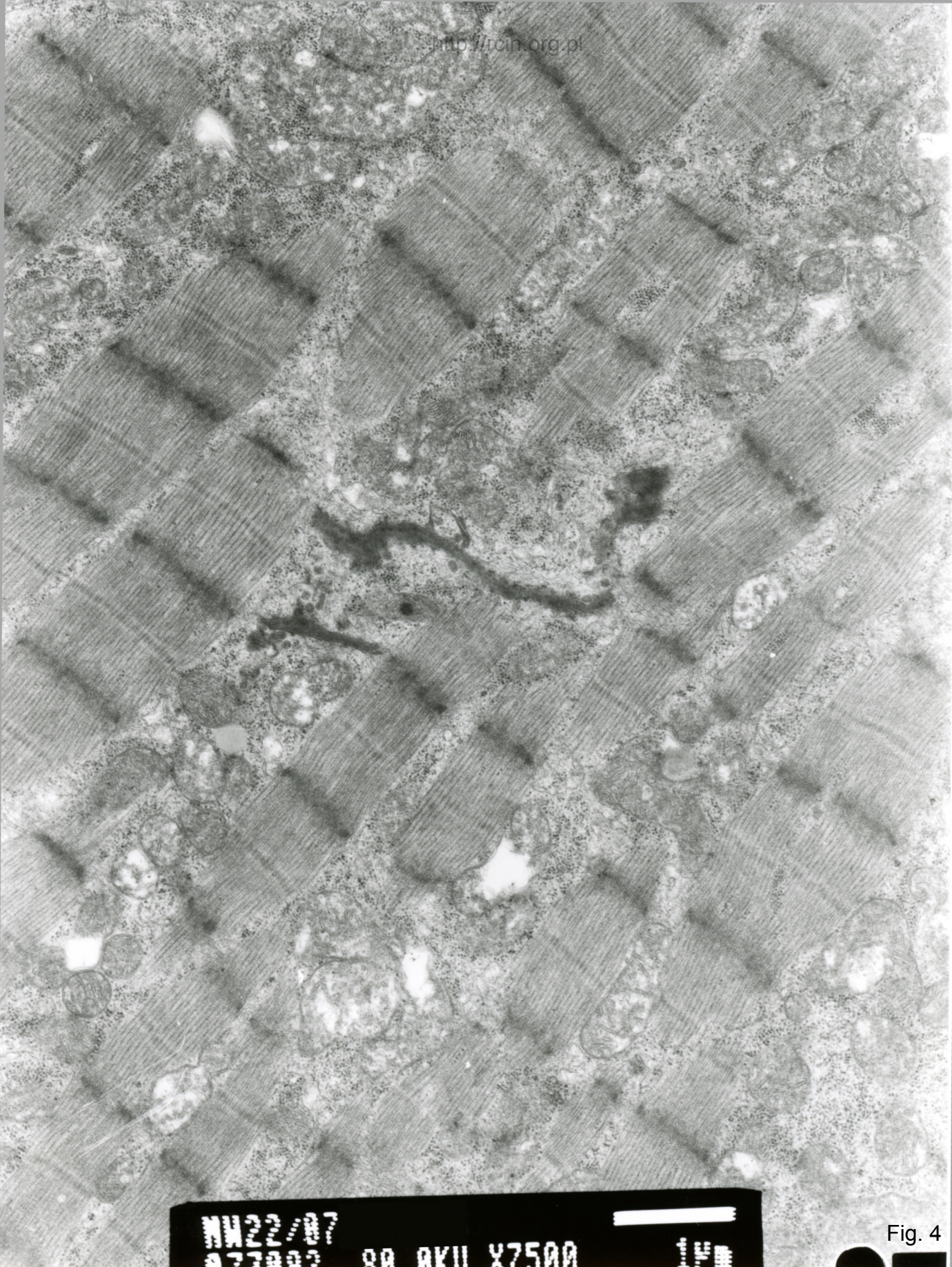


AF 22/07/SERCE
091000 80.0KV X5000



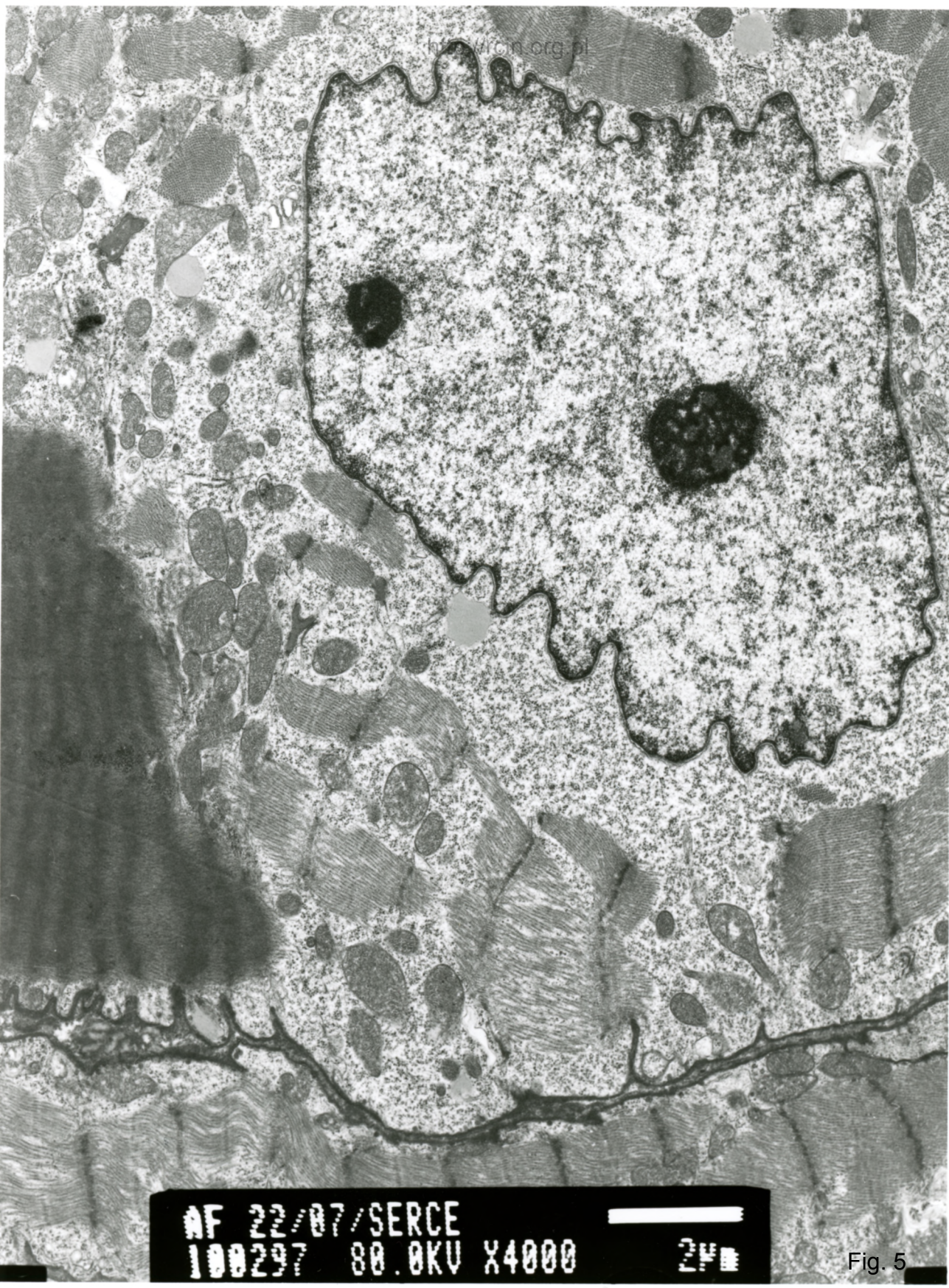
1µm

Fig. 3



MM22/07
073003 80 AKU X2500 15

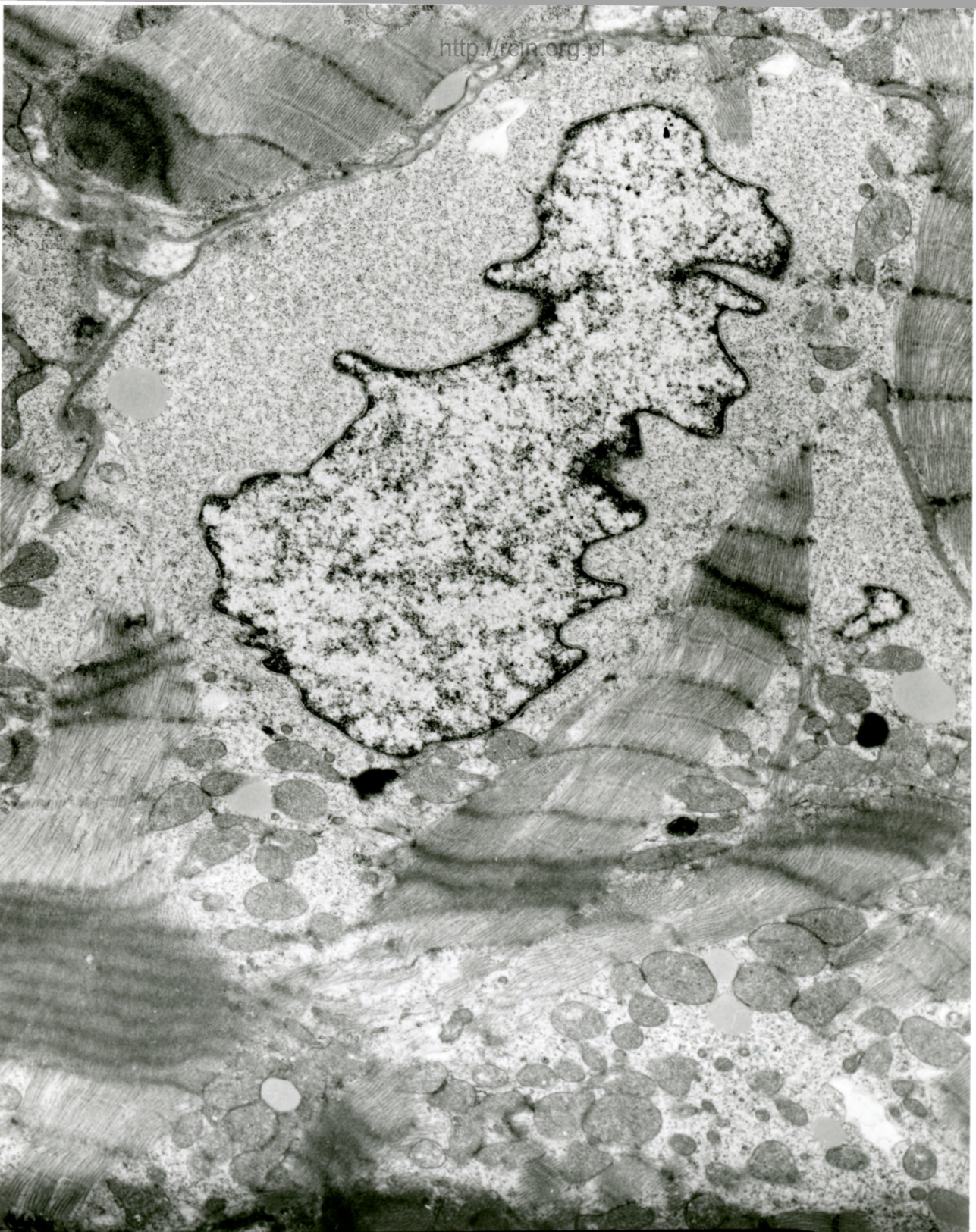
Fig. 4



http://icm.org.pl

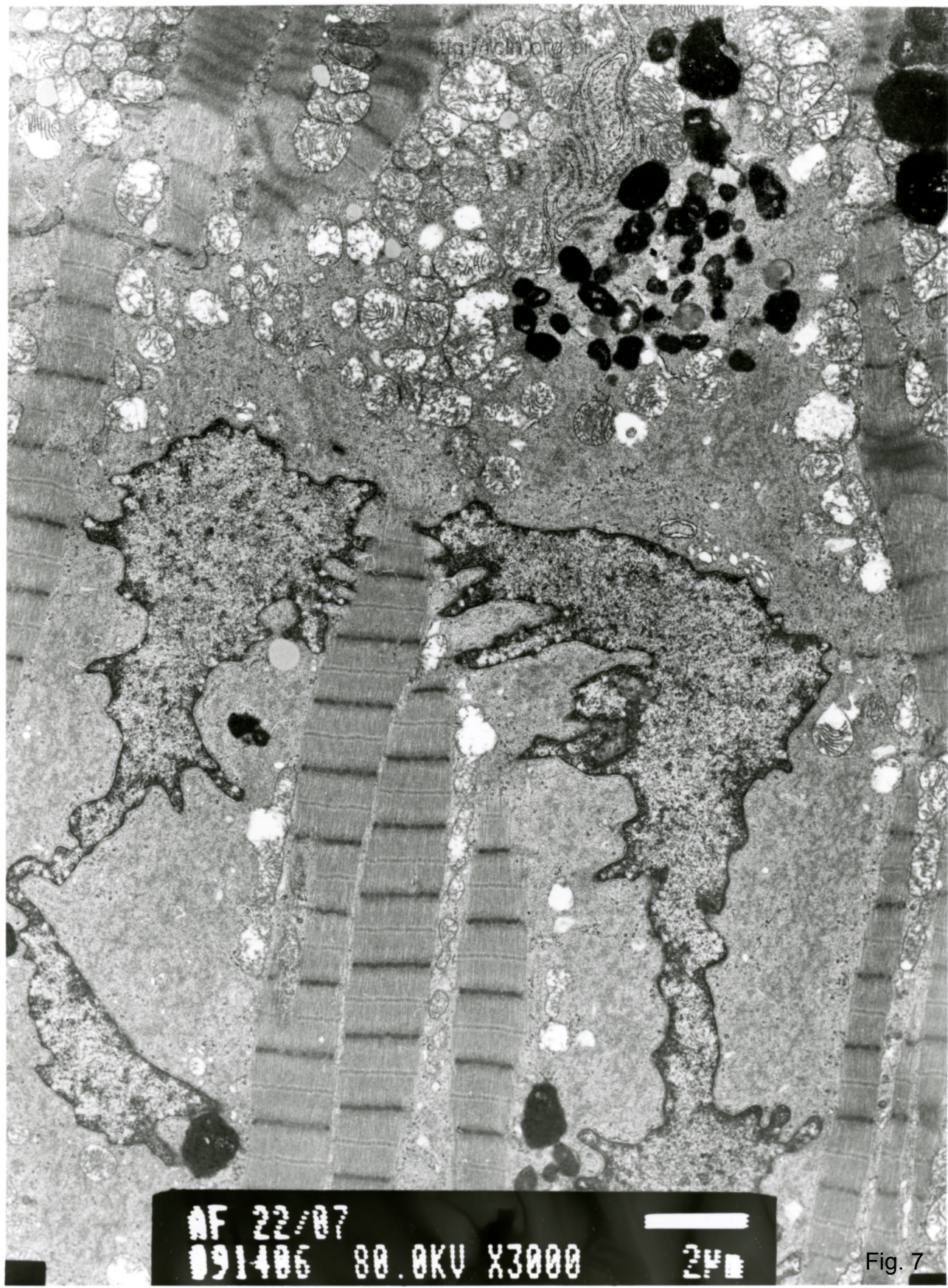
AF 22/07/SERCE
100297 80.0KV X4000 24

Fig. 5



AF 22/07/SERCE
091100 00 0KV X4000

Fig 6

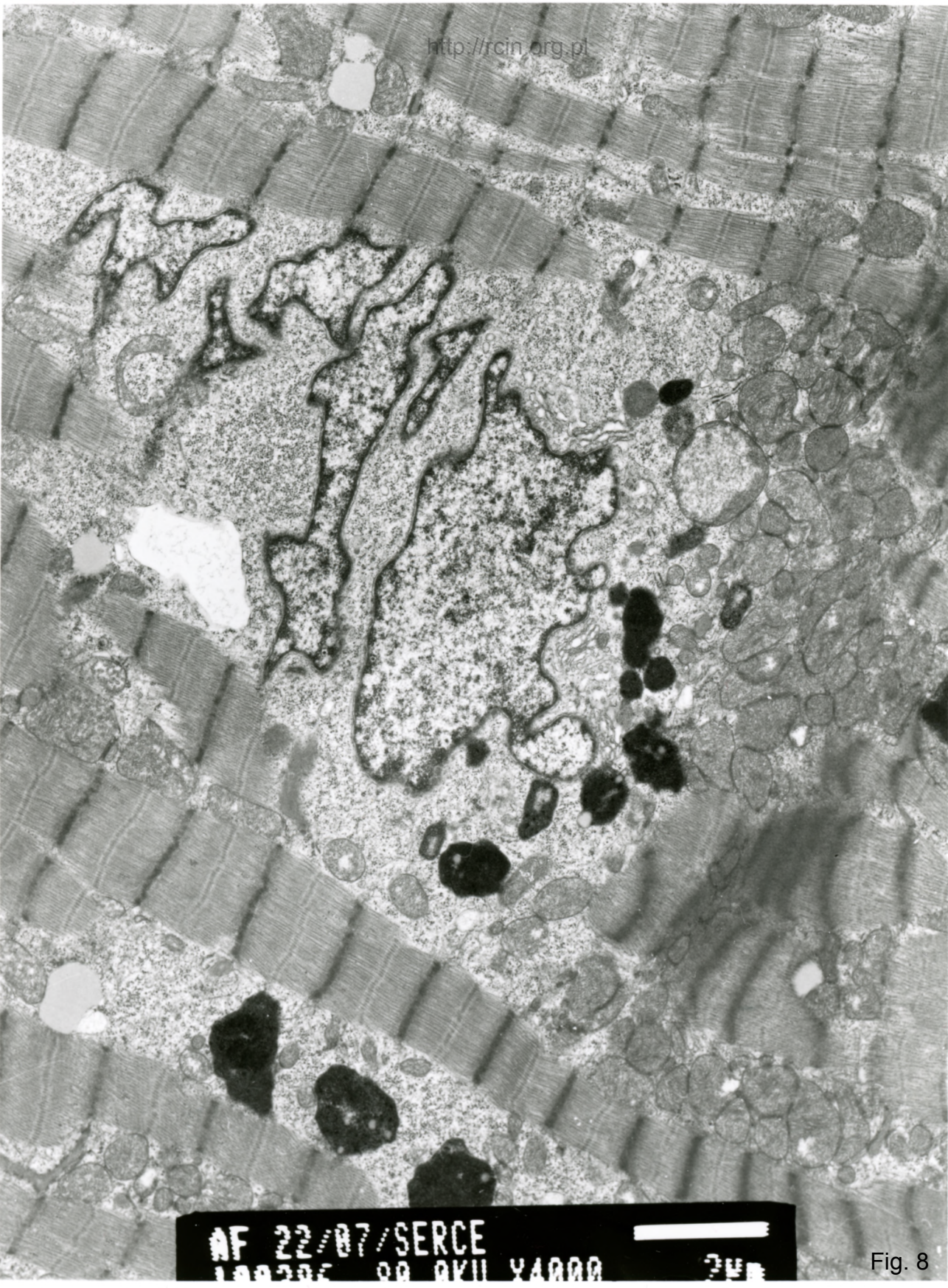


AF 22/07

091406 80.0KV X3000

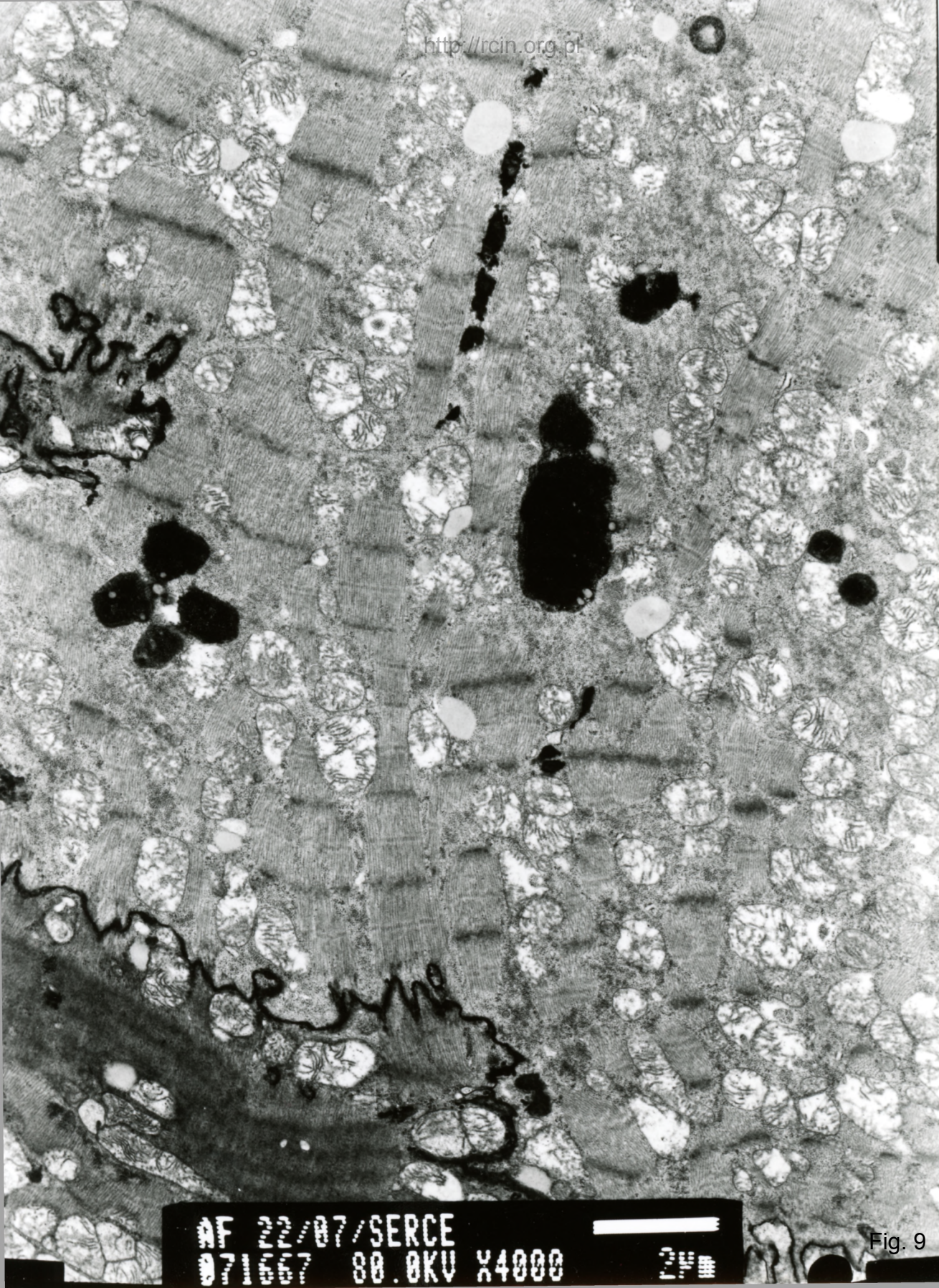
2µm

Fig. 7

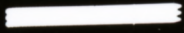


AF 22/87/SERCE
100385 00 PKU X4000 2UM

Fig. 8

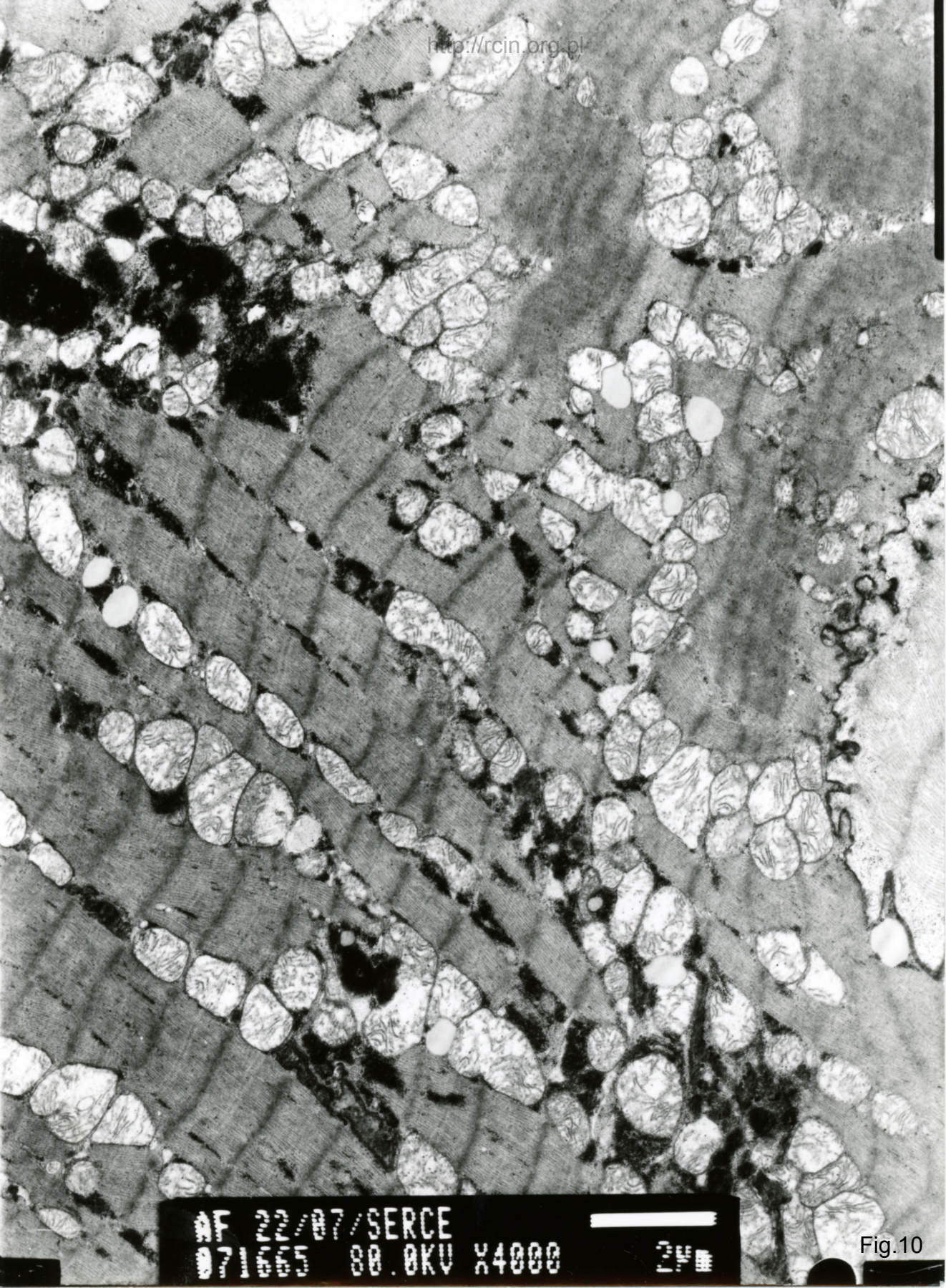


AF 22/07/SERCE
071067 80.0KV X4000

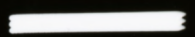


2µm

Fig. 9

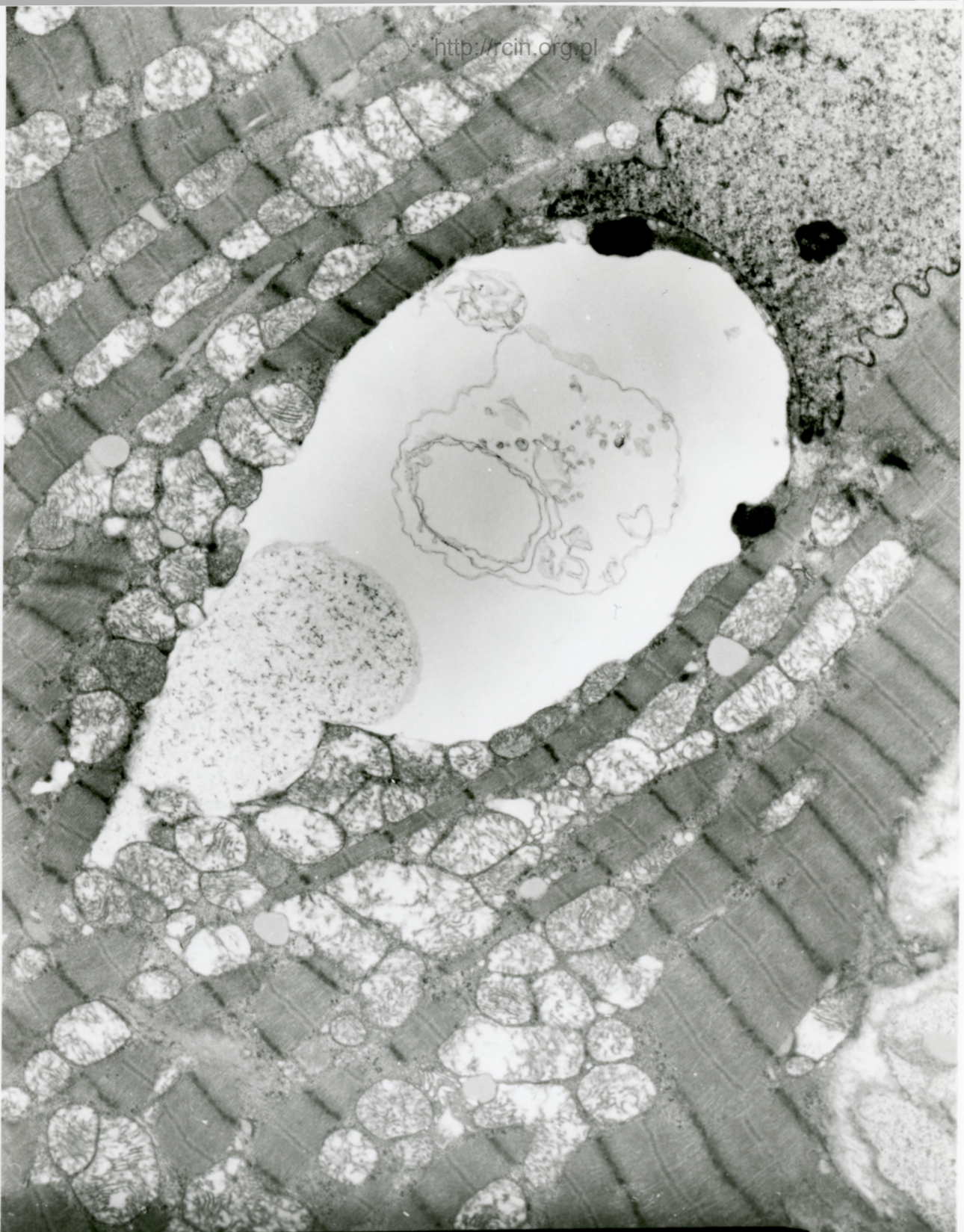


#F 22/07/SERCE
071005 80.0KV X4000



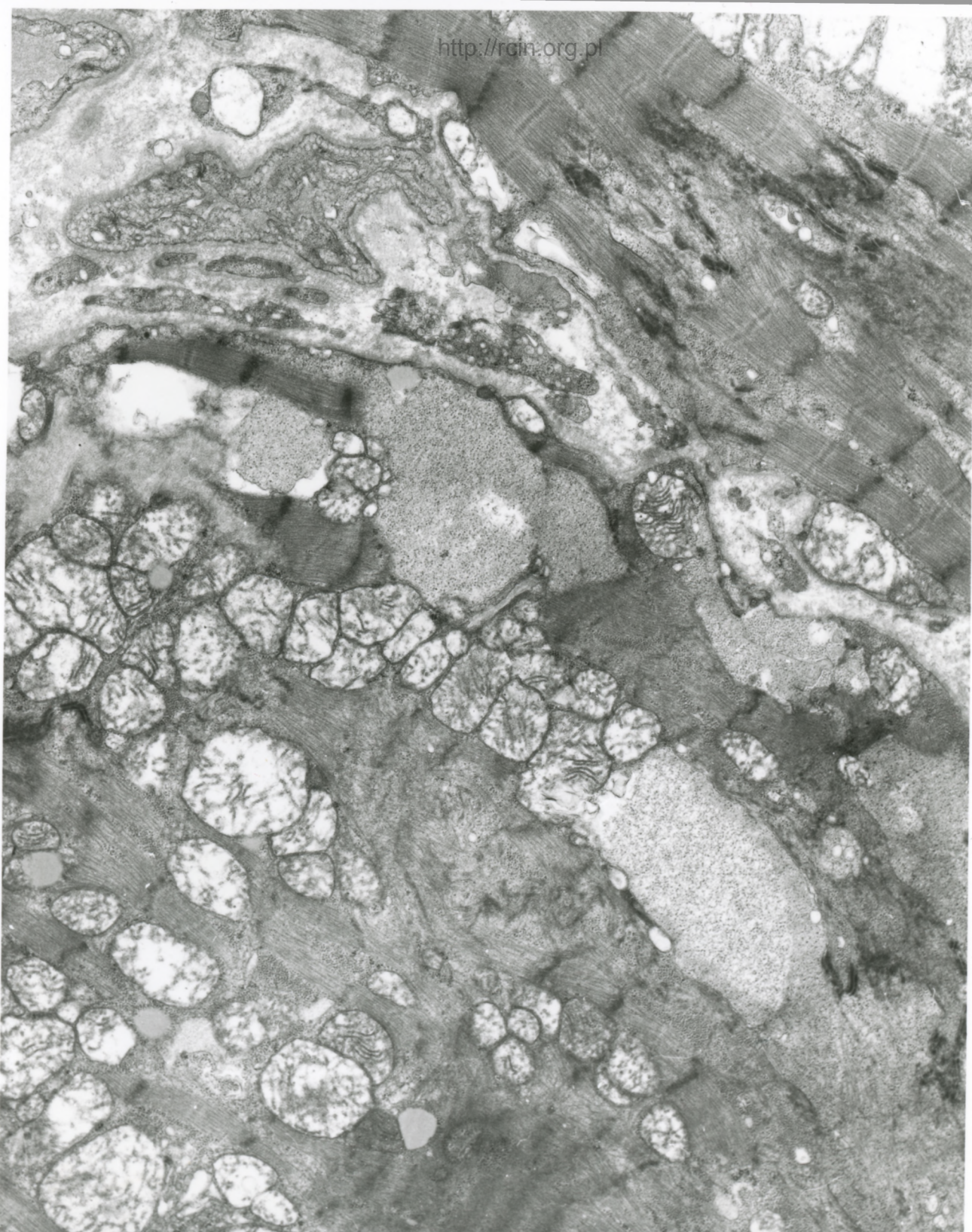
24

Fig.10



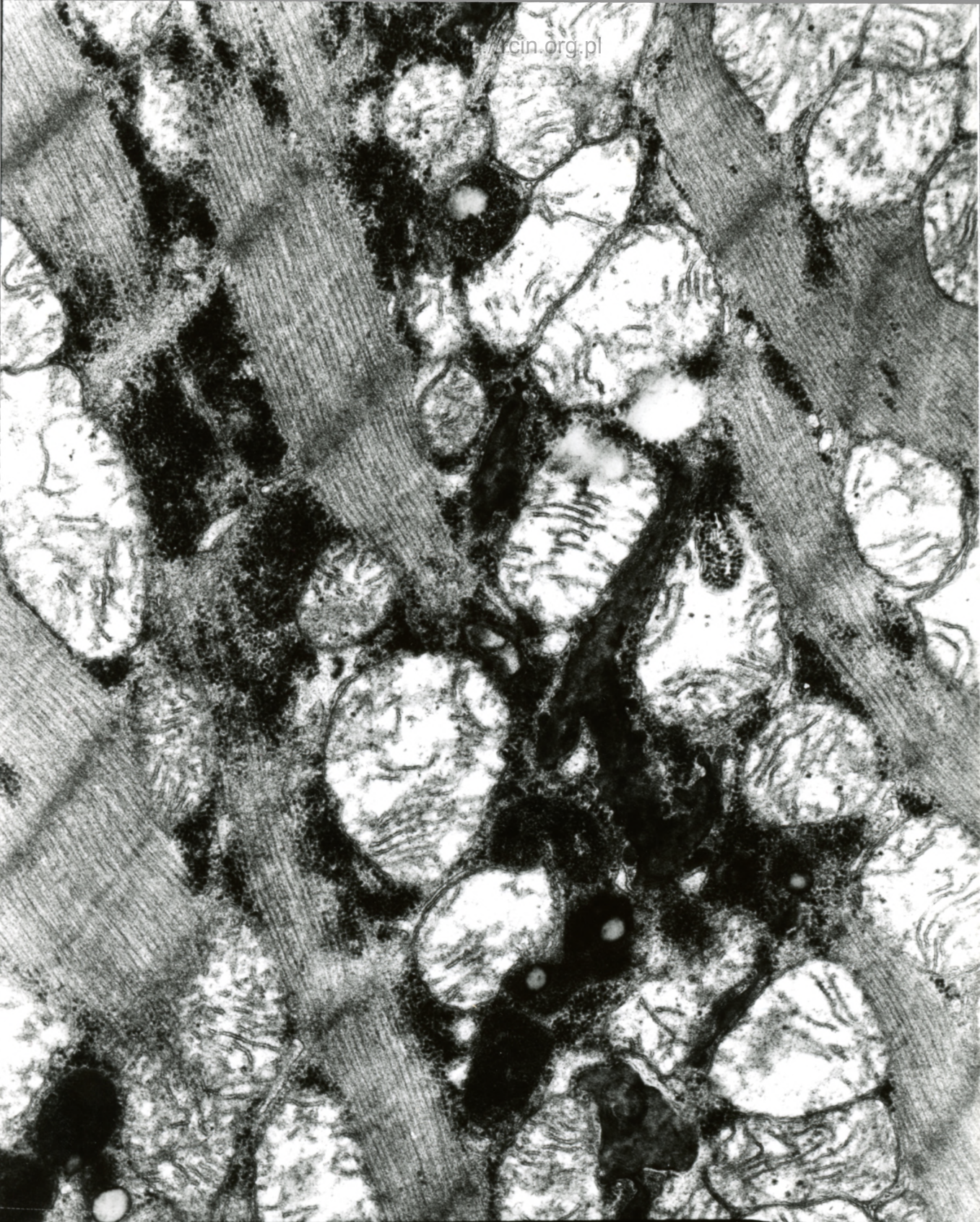
MF 22/07/SERCE
001005 00 BKU X4000 200

Fig. 11



AF 22/07/SERCE
091200 80 0KU X5000

Fig.12



AF 22/07/SERCE
071671 80.0KV X12K 500nm

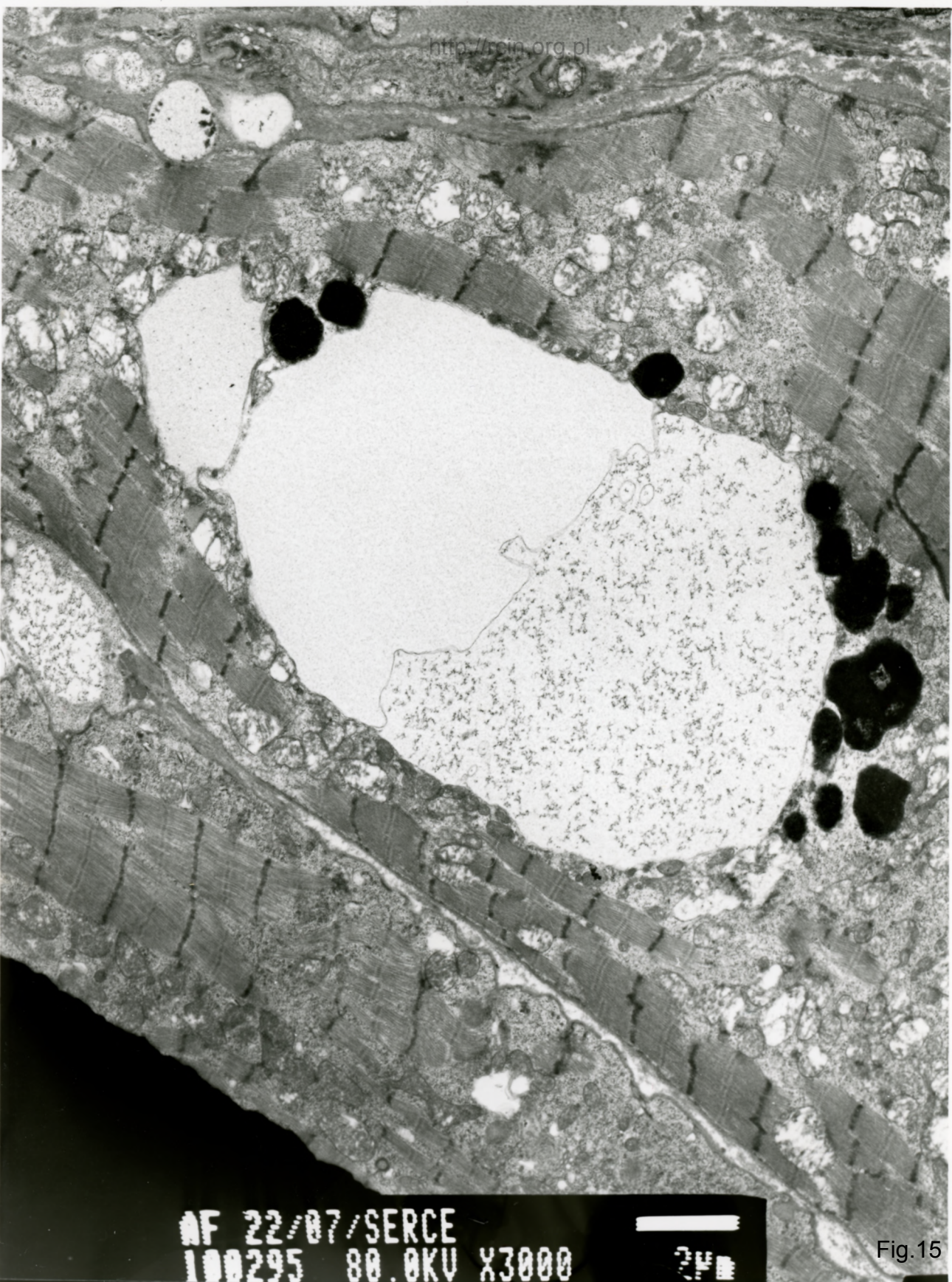
Fig.13



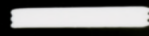
AF 22/07/SERCE
091093 80.0KV X3000

2µm

Fig.14

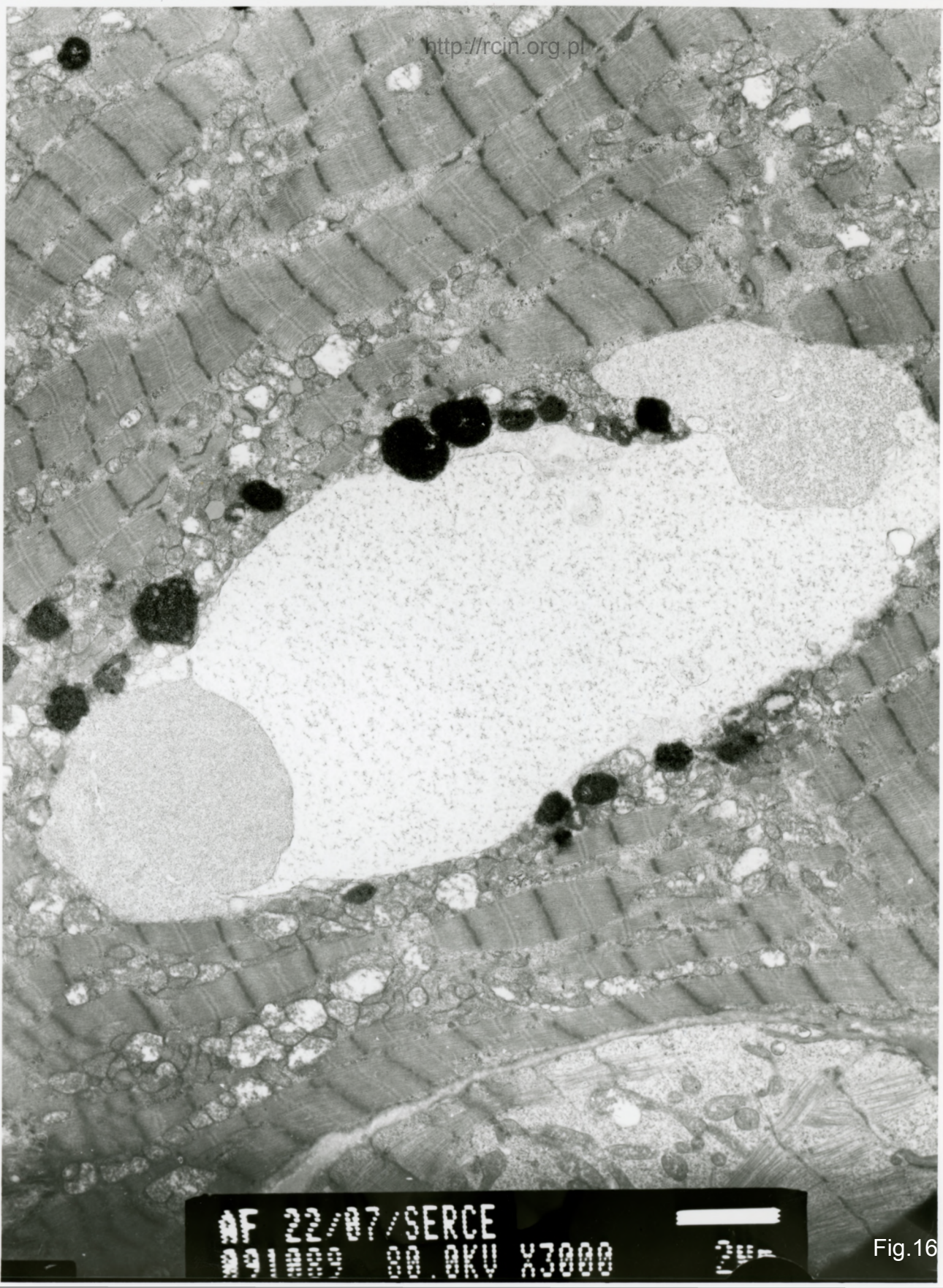


MF 22/07/SERCE
100295 80.0KV X3000

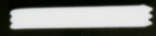


2µm

Fig.15

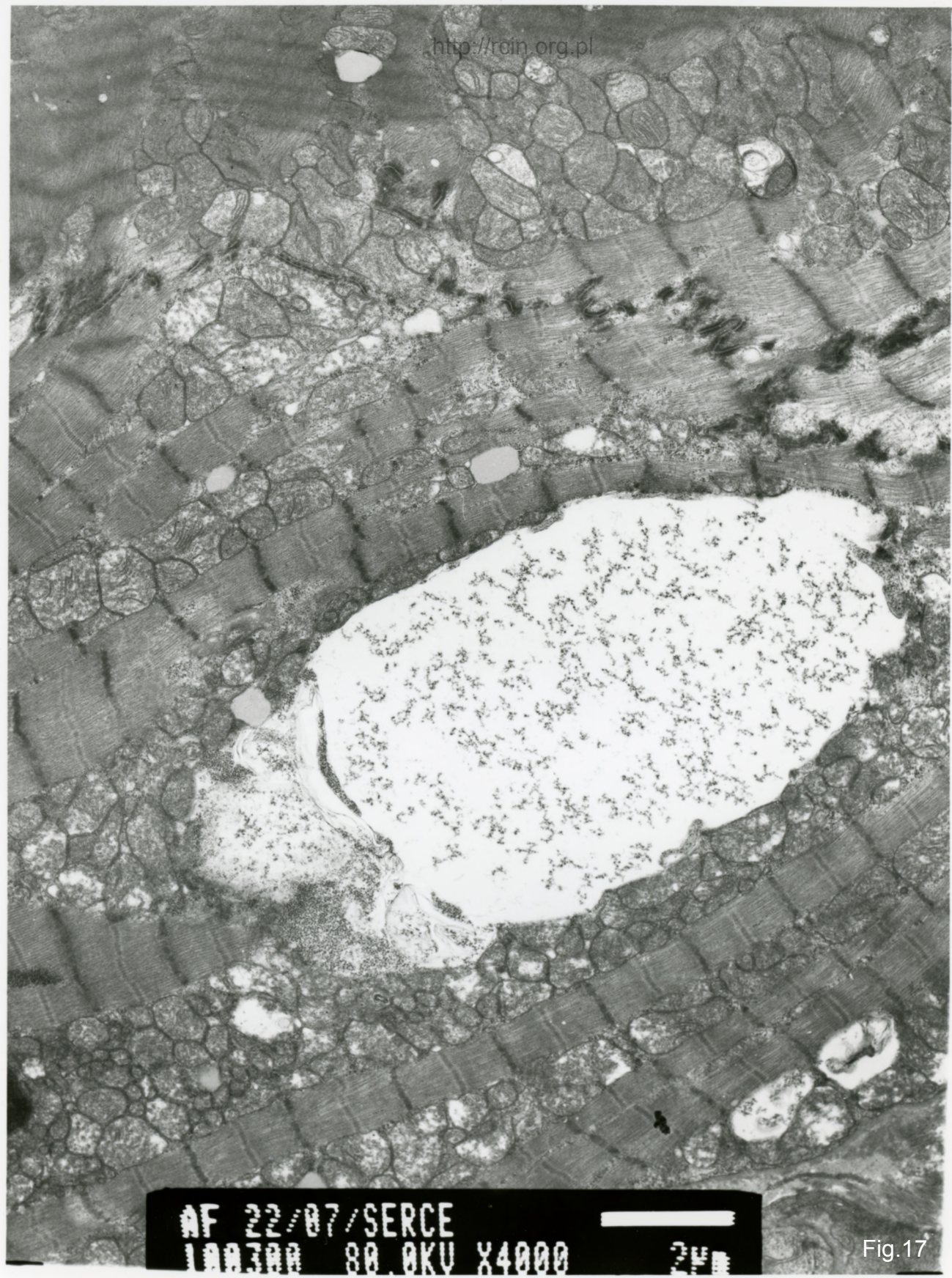


AF 22/07/SERCE
091000 80.0KV X3000



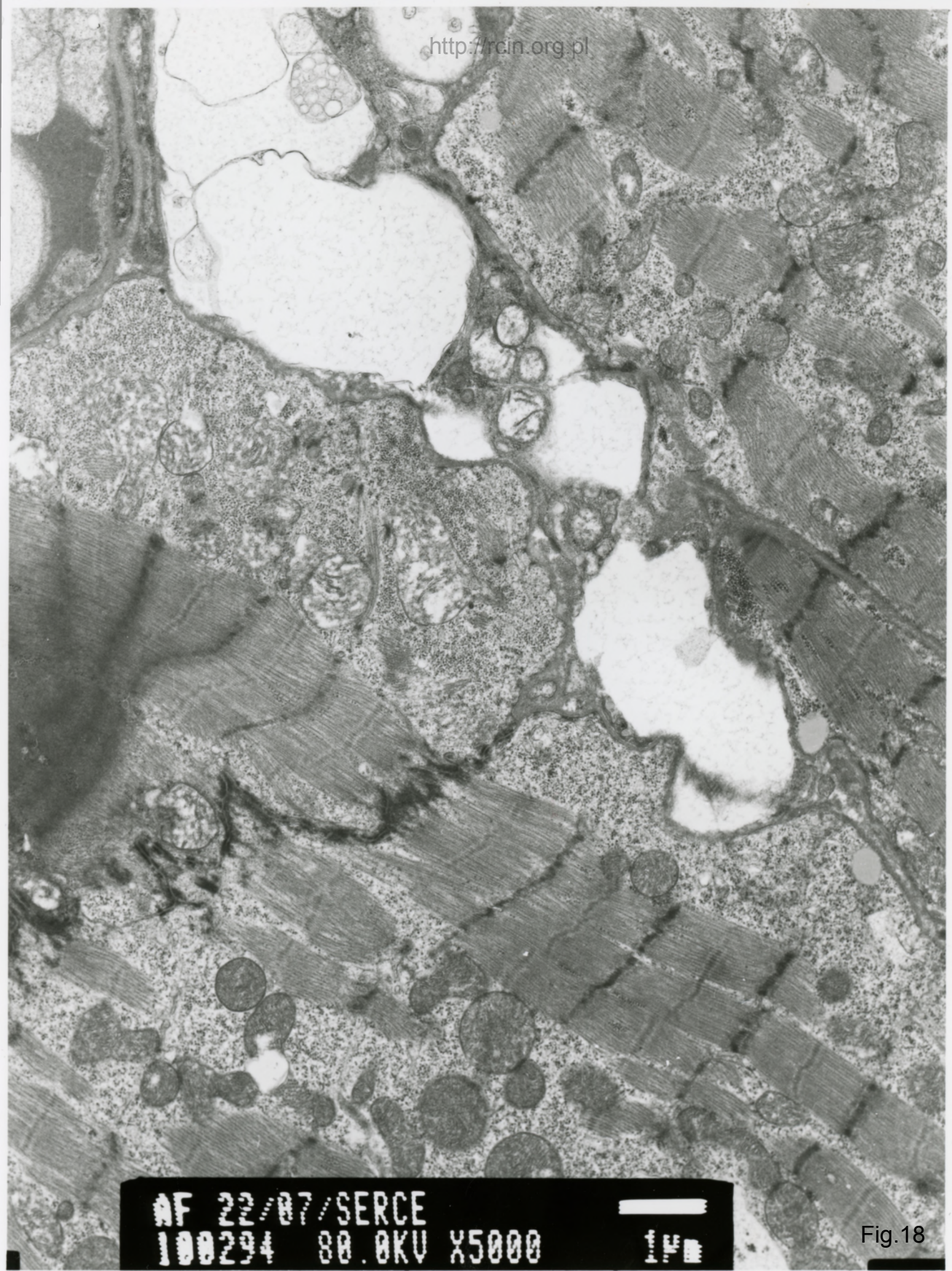
2µm

Fig.16

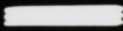


AF 22/07/SERCE
100300 80.0KV X4000 24

Fig.17

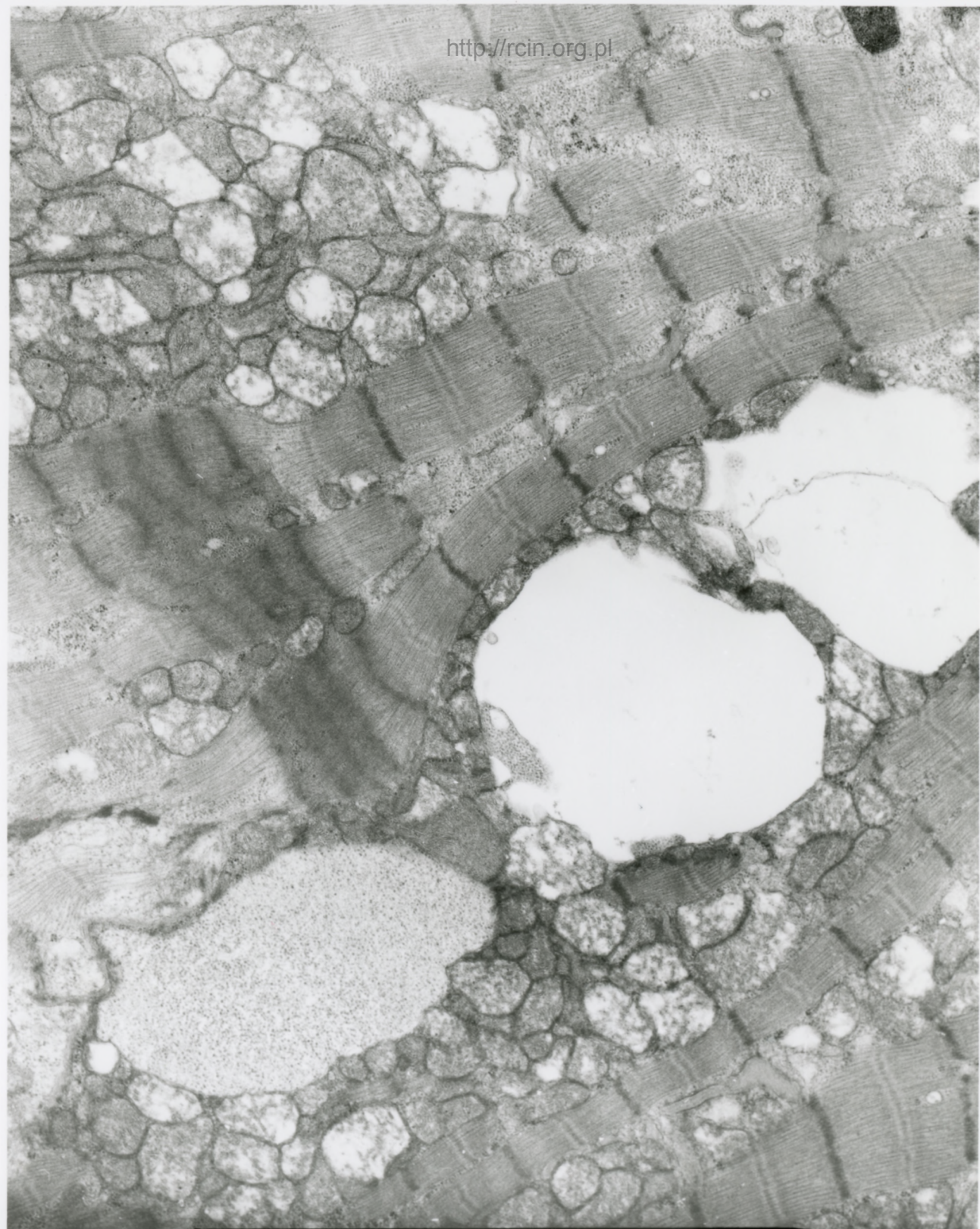


AF 22/07/SERCE
100294 80.0KV X5000



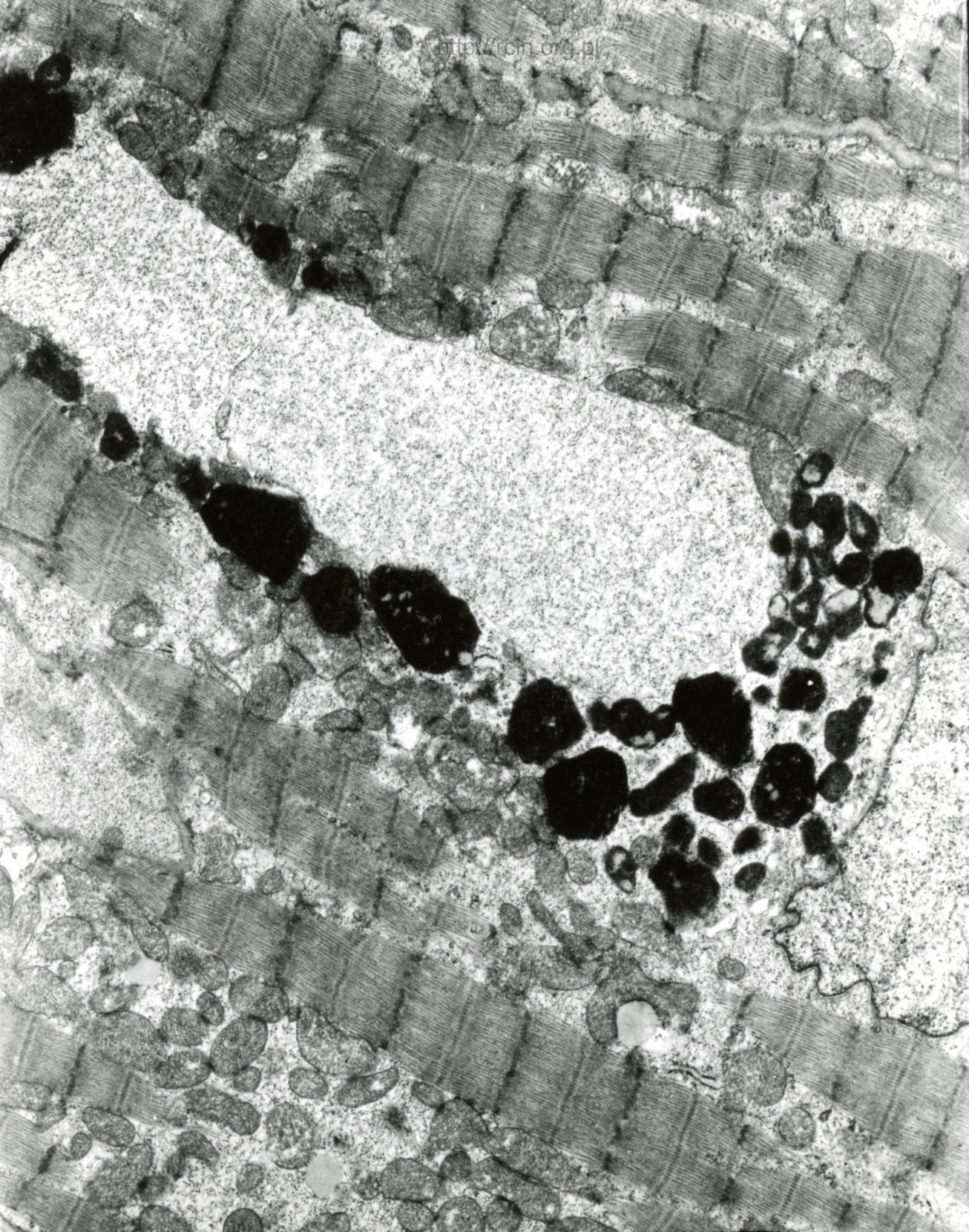
1µm

Fig.18



AF 22/07/SERCE
091001 80.0KV X6000

Fig.19



AF 22/07/SERCE
071669 80.0KV X5000

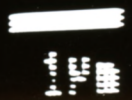
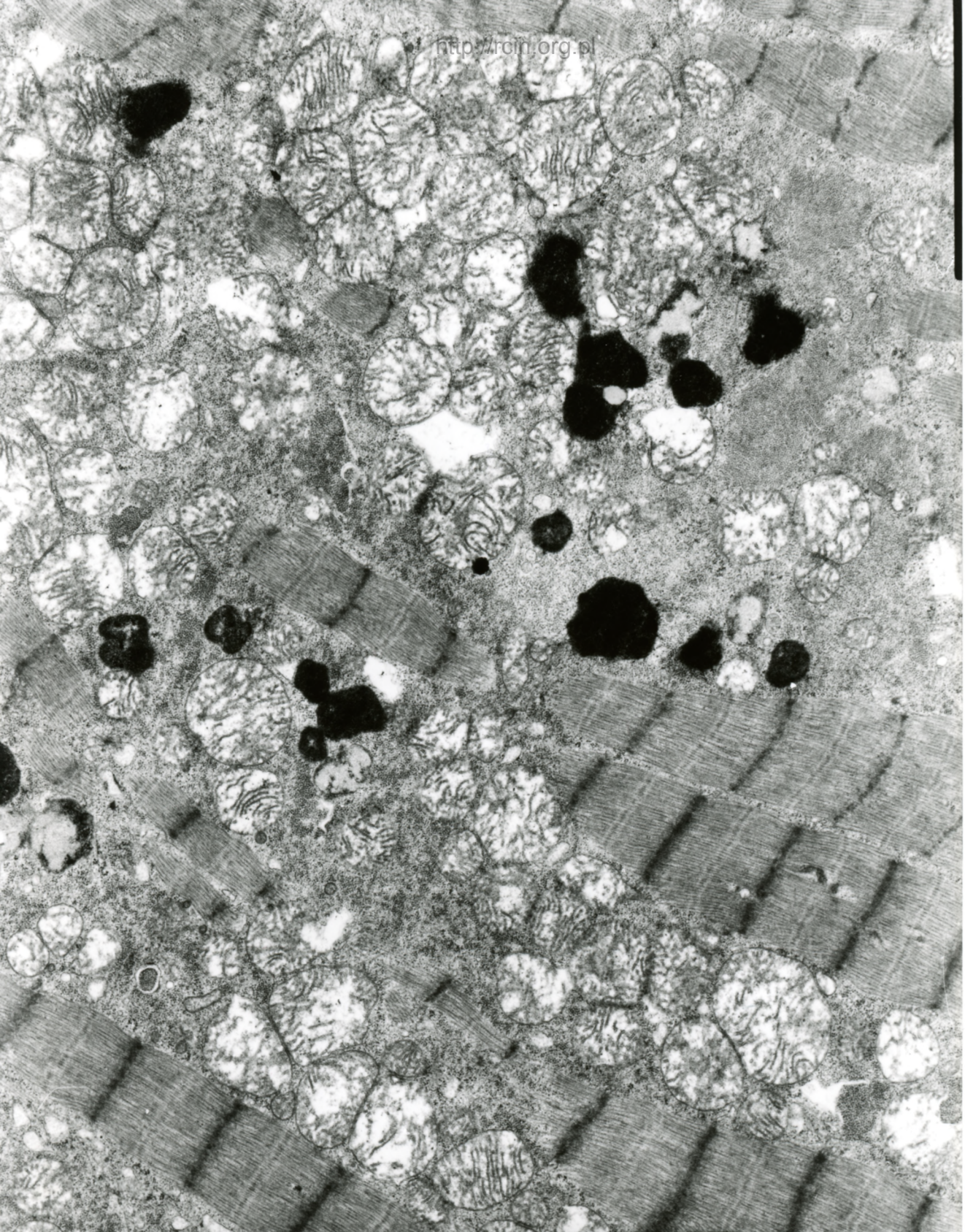
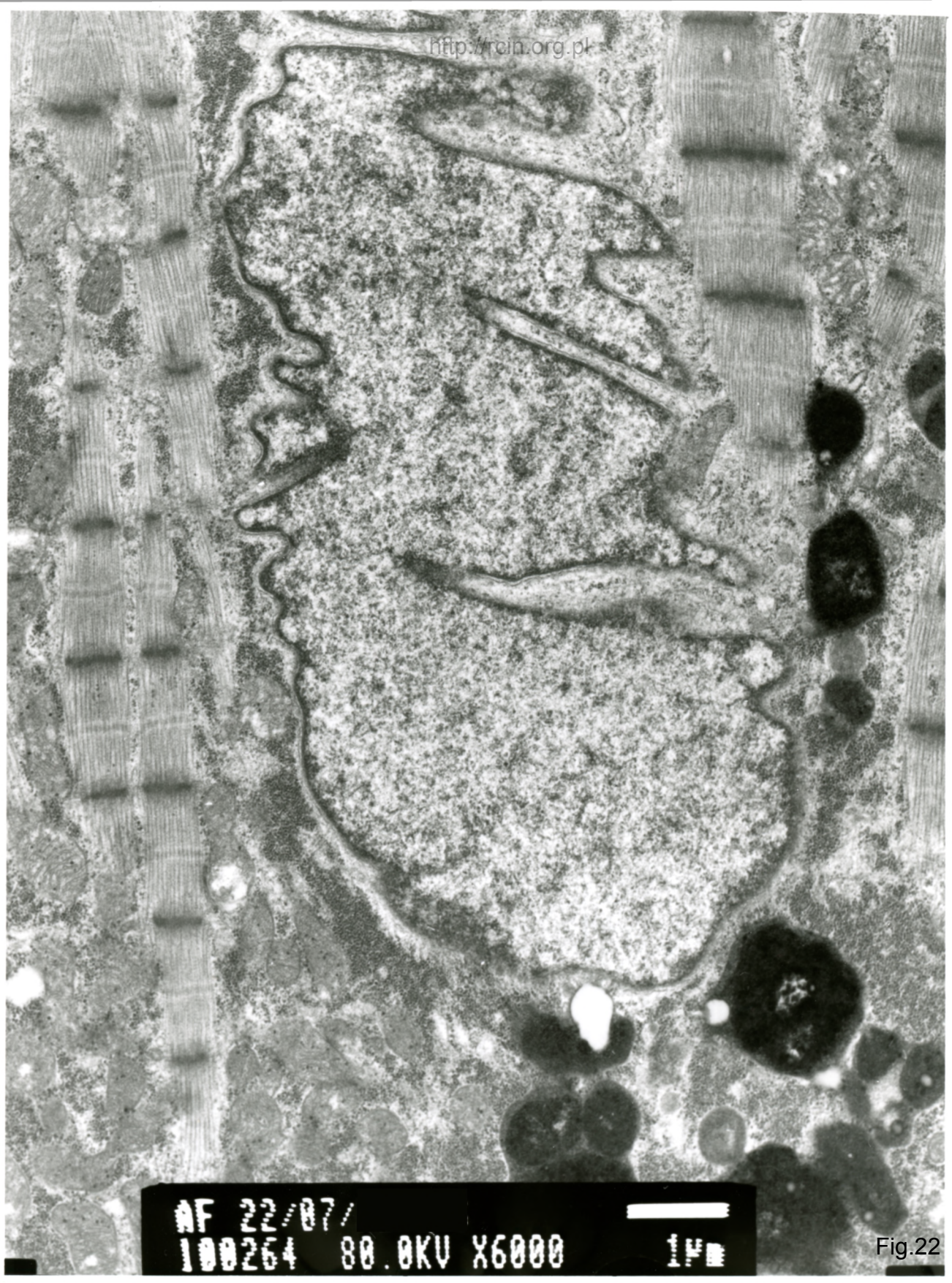


Fig.20



AF 22/07/SERCE
071660 8A AKU X5000

Fig.21

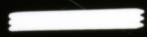


AF 22/07/
100264 80.0KV X6000 1µm

Fig.22

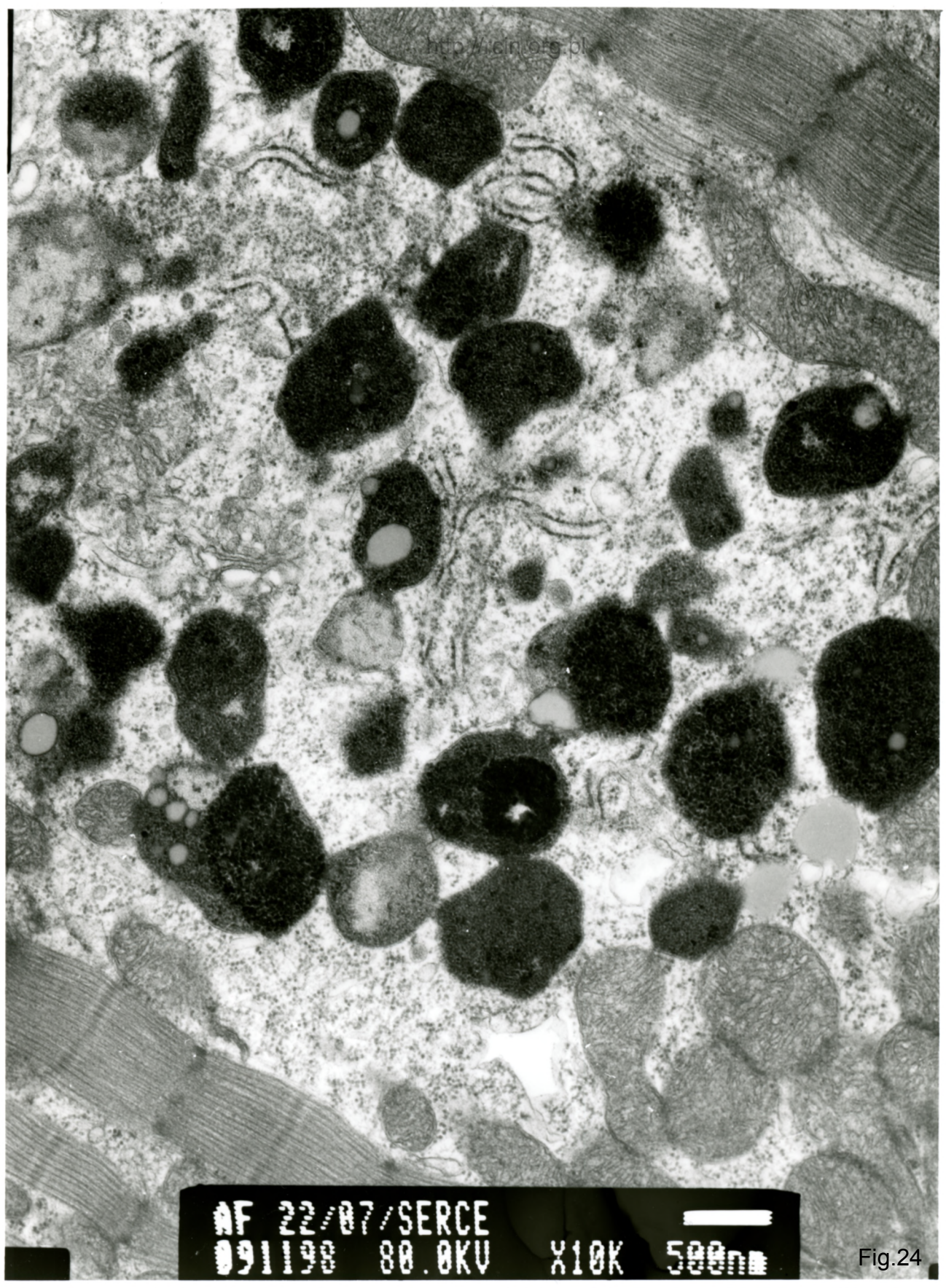


AF 22/07/SERCE
071670 80.0KV X6000



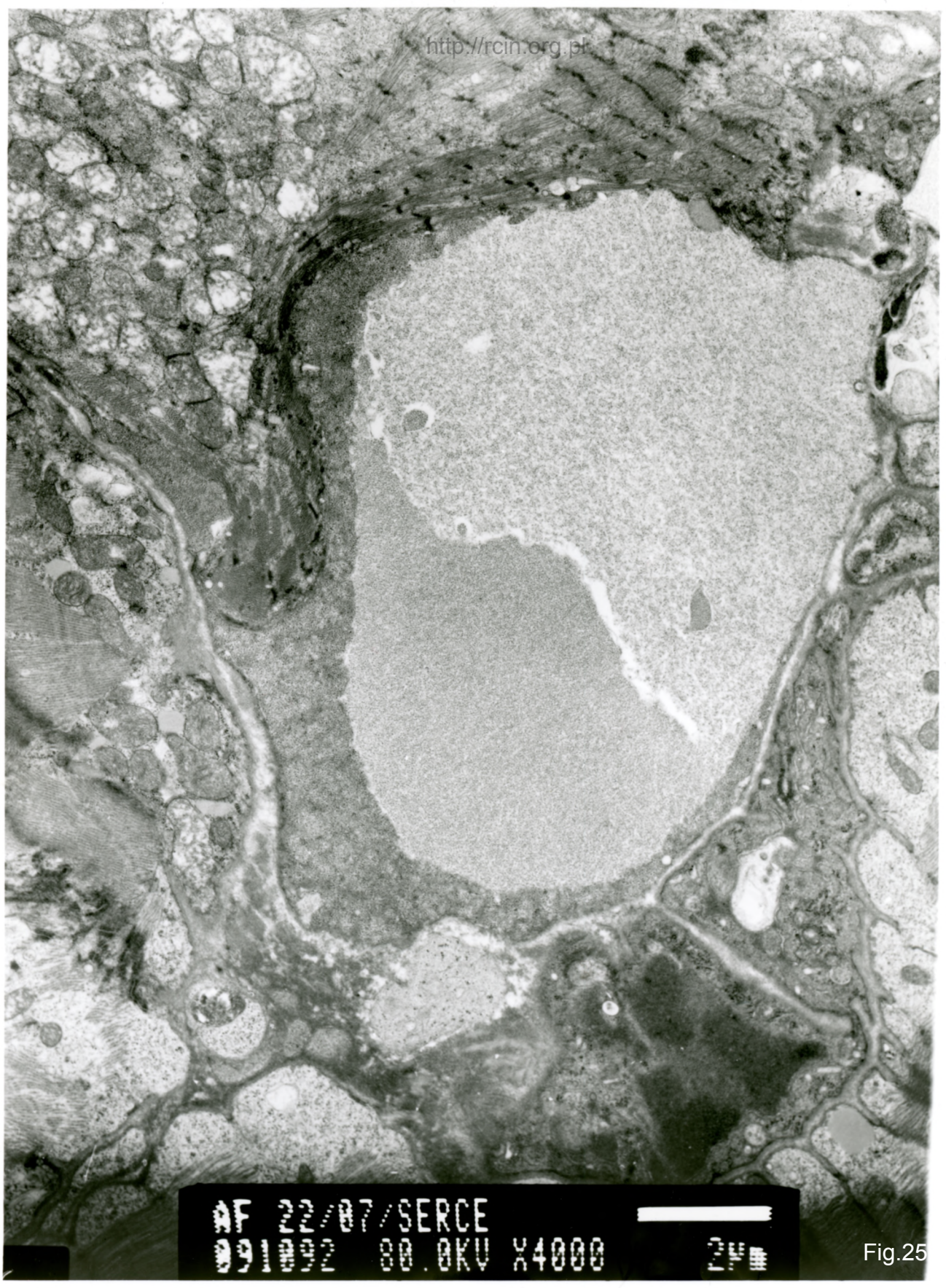
1 μm

Fig.23



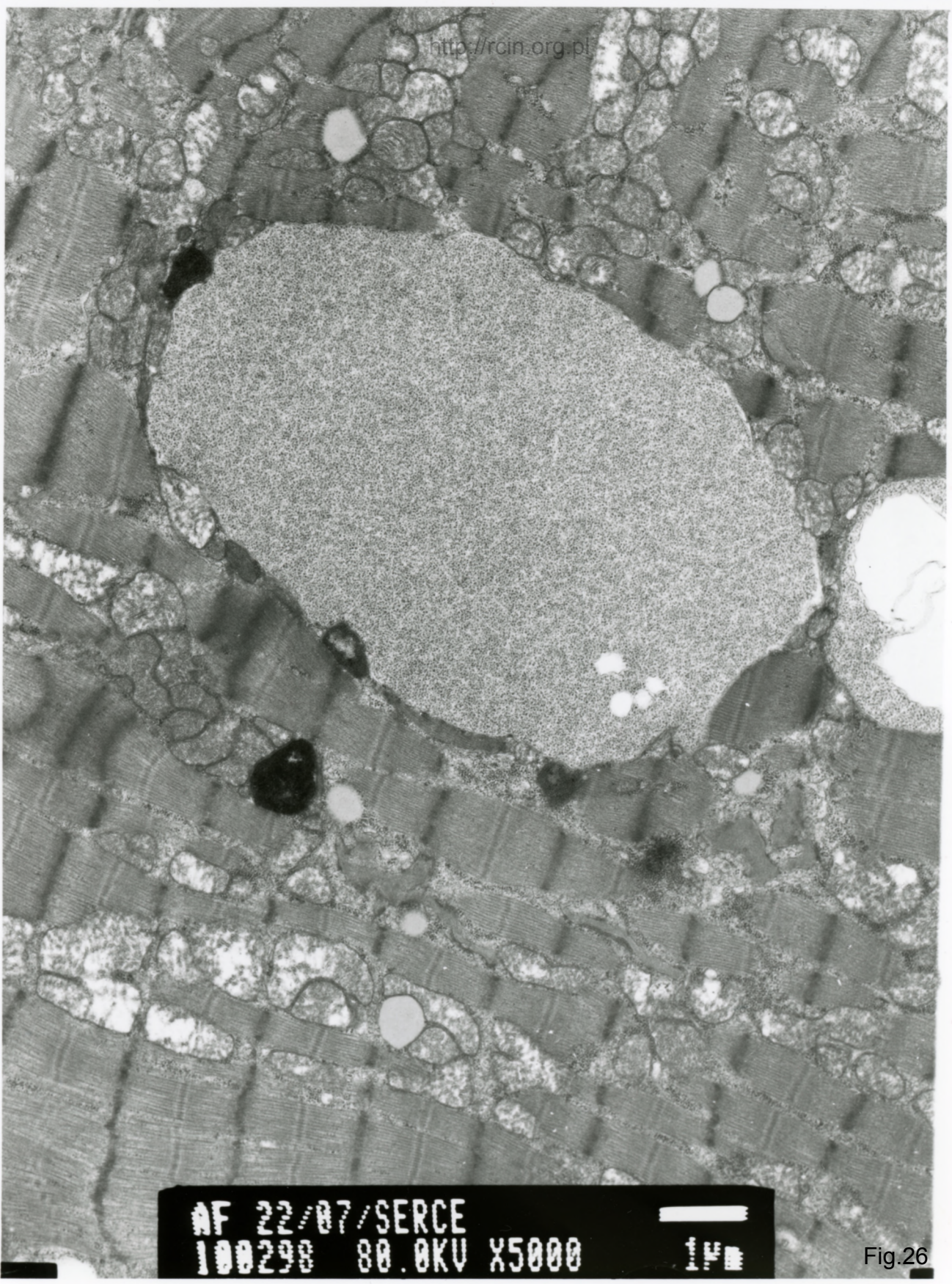
AF 22/07/SERCE
091198 80.0KV X10K 500nm

Fig.24

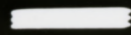


AF 22/07/SERCE
091032 80.0KV X4000 2µm

Fig.25

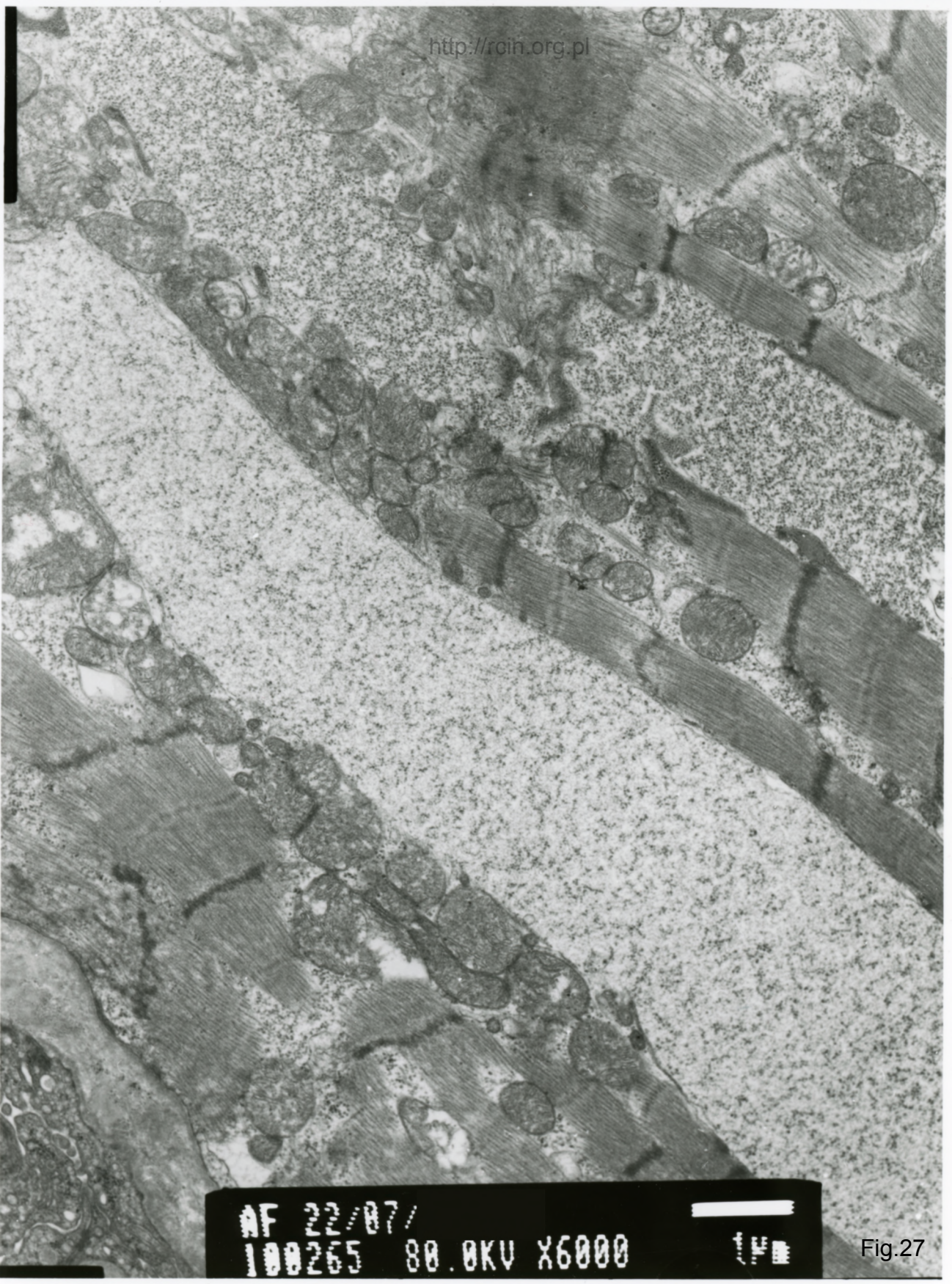


AF 22/07/SERCE
100298 80.0KV X5000



1µm

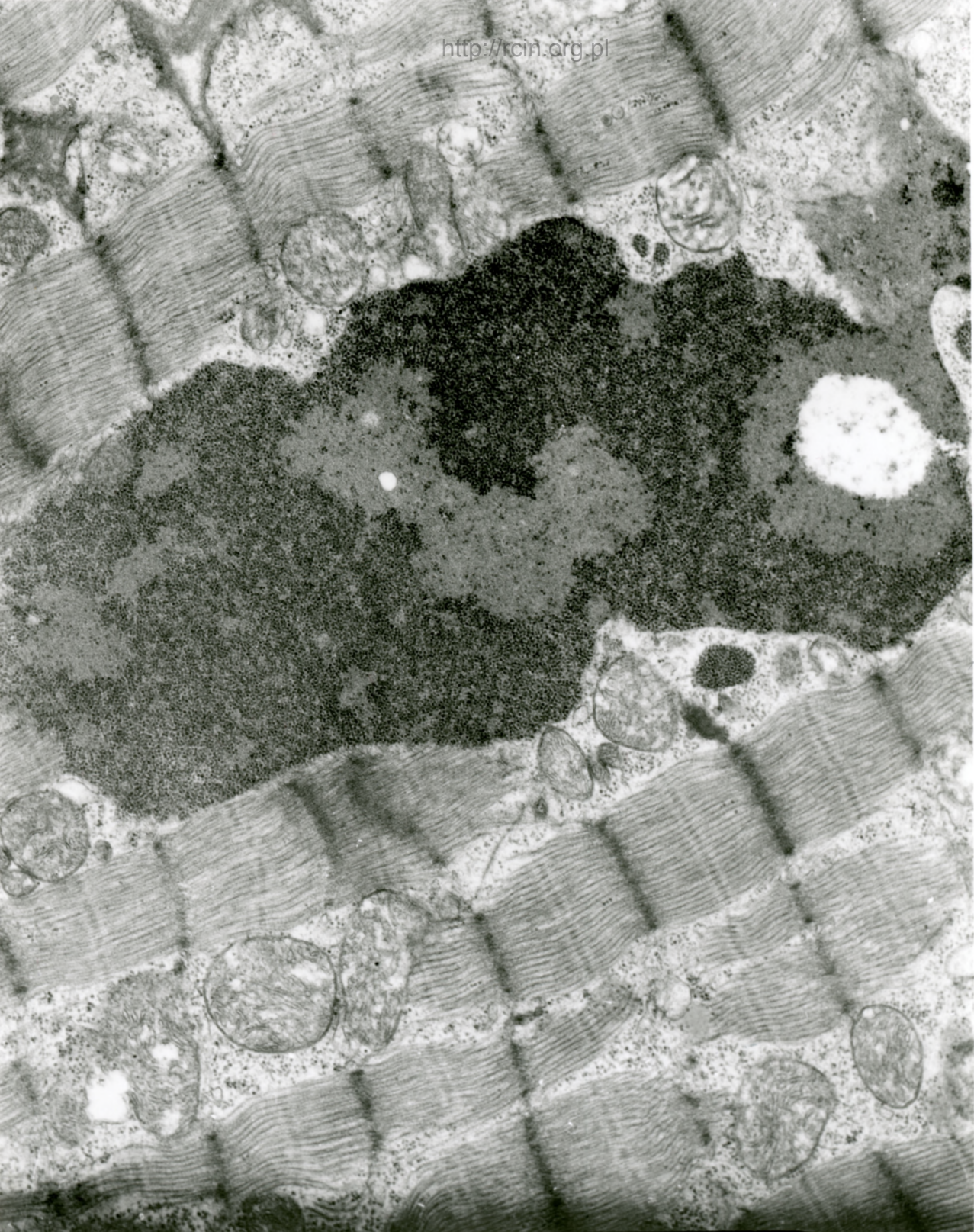
Fig.26



AF 22/07/
100265 80.0KV X6000



Fig.27



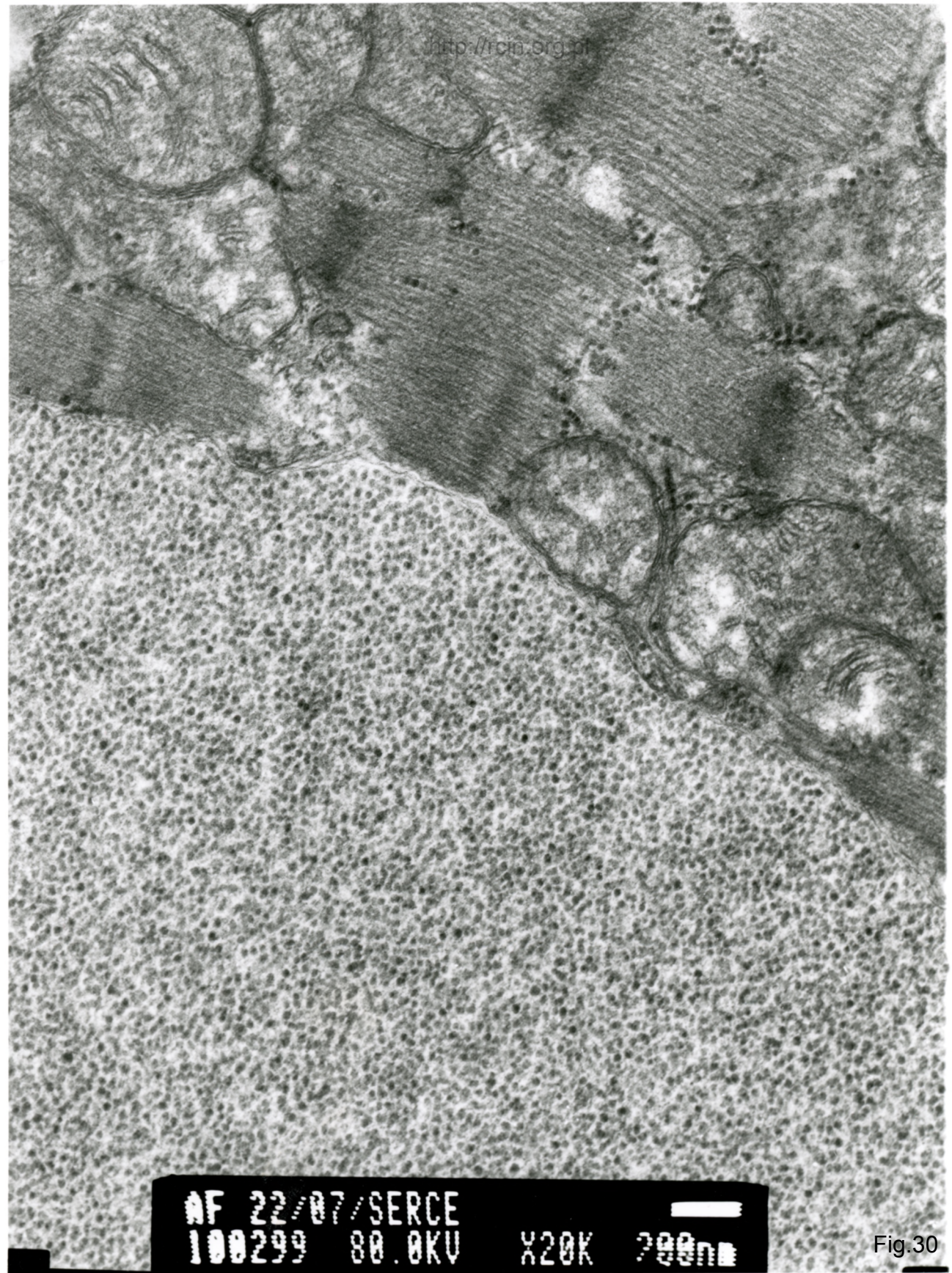
AF 22/07/SERCE
001000 00 AKU Y7500

Fig.28



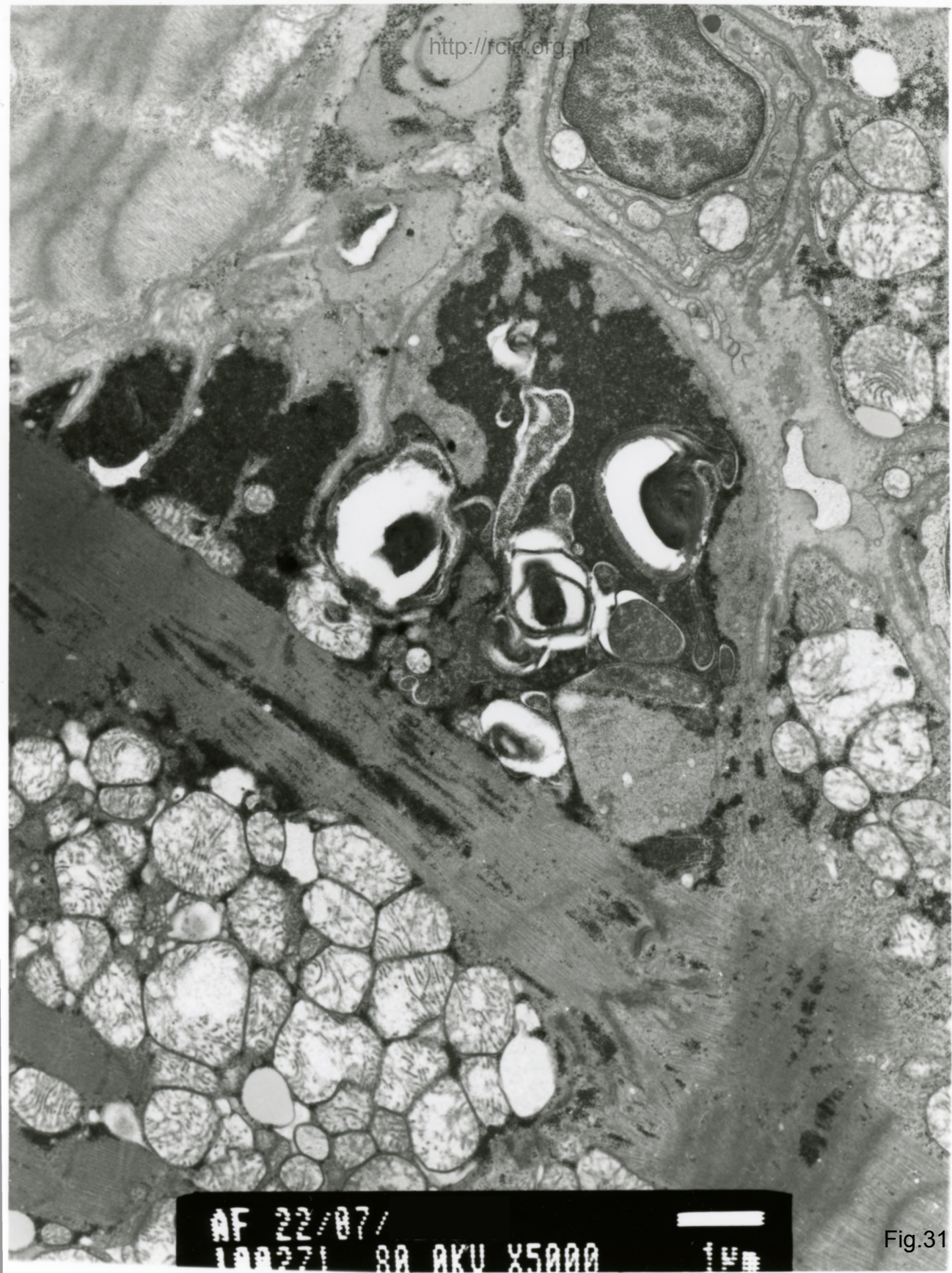
AF 22/07/
100266 80.0KV X15K 5000

Fig.29



AF 22/07/SERCE
100299 80.0KV X20K 700nm

Fig.30



AF 22/07/
100271 80 AKU X5000 14

Fig.31

22/07

1. 42

Kardiomiopatia rodzinna, zaburzenia rytmu serca

Analiza ultrastrukturalna wykazała że w części biopsjatu architektura kardiomiocytów nie odbiega znacznie od normy (Fig. 1-4). W niektórych komórkach obserwowano jednak, szczególnie w pobliżu jąder kardiomiocytów, dezorganizację sarkomerów i zanik miofibrili (Fig. 5-8). Wiele mitochondriów wykazywało cechy obrzęku, charakteryzowało się jasną macierzą i ubytkiem grzebieni mitochondrialnych (Fig. 9-13). Licznie występowały obłonione wakuole (Fig. 14-19) oraz złogi lipofuscyny (Fig. 20-24). Ogniskowo obserwowano duże nagromadzenie ziaren glikogenu (Fig. 25-30) oraz autofagię (Fig. 31).

Familial cardiomyopathy, arrhythmia

Ultrastructural analysis revealed focally unchanged cardiomyocytes architecture (Figs. 1-4). However, disorganization of sarcomeres and atrophy of myofibrils was observed in some cells, especially in the vicinity of cardiomyocytes nuclei (Figs. 5-8). Many mitochondria were swollen and characterized by a bright mitochondrial matrix and loss of cristae (Figs. 9-13). Vacuole-like structures (Figs. 14-19) and lipofuscin deposits (Figs. 20-24) were abundant. Focally, large accumulation of glycogen granules (Fig. 25-30) and autophagy (Fig. 31) were observed.