

## IDENTIFICATION AND LOCALISATION OF CALDESMON-LIKE PROTEIN IN AMOEBA PROTEUS

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Using antigen-purified anti-chicken gizzard polyclonal serum (cd2), which was previously shown to cross-react with plant caldesmon-like protein [1], *Amoeba proteus* protein extracts were analysed by Western blots. Two closely migrating bands were detected at an apparent molecular weight of approximately 65/66 kDa. The cellular distribution of amoeba-caldesmon in migrating and pinocytosing cells was analysed by immunofluorescence method using the confocal laser scanning microscope. Amoebae were fixed and stained with antibody against chicken caldesmon and FITC-conjugated secondary antibody while F-actin was labelled with rhodamine-phalloidin. In migrating cells, caldesmon-like protein is concentrated in the uroidal region and frontal edges. It is also accumulated around the nucleus and in the deeper ectoplasmic layer of the cell cortex. In the middle-anterior region of the cytoplasm the protein is focused in small dots, that correspond to the plaques of adhesion [2]. In pinocytotic spheres which are apolar, caldesmon-like protein is distributed more randomly than in migrating amoebae. It is also visible in the zone of perinuclear cytoskeleton. Double staining revealed co-localization of amoeba caldesmon with F-actin except the thin layer of actin microfilaments network attached to the cytoplasmic surface of the cell membrane, i.e. hyaline zone which is devoid of caldesmon. It is found only in deeper rigid and gelled ectoplasm.

### REFERENCES

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