

STRUCTURAL STUDIES ON CYTOSKELETAL PROTEINS

KRISTINA DJINOVIÈ-CARUGO

Structural Biology Lab. Sincrotrone Trieste in Area Science Park
S.S. 14 Km 163,5 34012 Basovizza (TS), Italy

A number of components of cytoskeleton are very large proteins which are in their complete native form non amenable to the structure determination via X-ray diffraction techniques due to their non-globular shape and intrinsic flexibility which hinder the formation of suitable crystals. Dissecting such proteins into their representative building blocks - domains and subsequent structural studies of these have shown to give valuable structural and functional information on the biological system.

Structural and evolutionary studies on actin-binding domains from spectrin and alpha-actinin as well as on the two central repeats of alpha-actinin will be presented.