

## MED-BIOL First Step to New Cancer Treatment

*Structure of new protein linked to cancer revealed.*

Some proteins, including Ras, are controlling signals for cell growth and division. Overactivation of the signaling can lead to cancer. Mutations that permanently activate Ras are found in up to 90% in pancreatic cancer. To become active, Ras needs to be processed by a protein called Rce1, which is an intramembrane proteinase. Membrane protein crystallization, essential for structure determination, is still a major challenge. Prof. Iwata and his colleagues applied their unique technique of using an antibody fragment to crystallise Rce1, and succeeded in determining the structure by X-ray crystallography. The structure will provide a boost to the design of new cancer drugs which inhibit Rce1 activity.



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