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**The Solution Structure of FADD Death Domain:
Structural Basis of Death Domain Interactions of Fas and
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A signal of Fas-mediated apoptosis is transferred through an adaptor protein FADD by interactions between death domains of Fas and FADD. To understand the signal transduction mechanism of Fas-mediated apoptosis, we solved the solution structure of a murine FADD death domain. It consists of 6 six helices arranged in a similar fold to the other death domains. The interactions between death domains of Fas and FADD analyzed by site-directed mutageneses indicate that charged residues in helices $\alpha 2$ and $\alpha 3$ are involved and the interacting helices appear to interact in anti-parallel pattern, $\alpha 2$ of FADD with $\alpha 3$ of Fas and *vice versa*. We think that the ligand-induced exposure of the binding site of Fas receptor and FADD is crucial to Fas-mediated apoptosis.