

# **Crystallographic Analysis of Eukaryotic Signaling Proteins**

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We have carried out structural analysis on a number of different components of signaling pathways that rely on tyrosine phosphorylation as the primary molecular switch. The following recent results will be discussed: The mechanism of activation of the small G-protein Ras by the nucleotide exchange factor SOS, the mechanism by which the STAT proteins (Signal Transducers and Activators of Transcription) are controlled by tyrosine phosphorylation, and the mechanism of the Src-family of tyrosine kinases.