Abstract
Phosphorylation is an important mechanism for regulation of protein function and aktivity. Tyrosine phosphorylation plays a critical role in signaling pathways. Aberrant tyrosine phosphorylation was observed in many cancer types. My work follows patological details of tyrosine phosphorylation sites of lung and colorectal cancers. Point of view includes aminoacid sequence, secondary structure, domain localization, expression, model organism ortholog occurrence. The project is based on analysis of literary informations and data from protein databases. There are no new phosphorylation sites in observed cancer types. Regular secondary structures, α-helices and β-sheets, are significantly phosphorylated in compare with loops. Annexin and Kinase domains are the most phosphorylated. Gene expression change of phosphorylated proteins occurs in observed cancer cells.