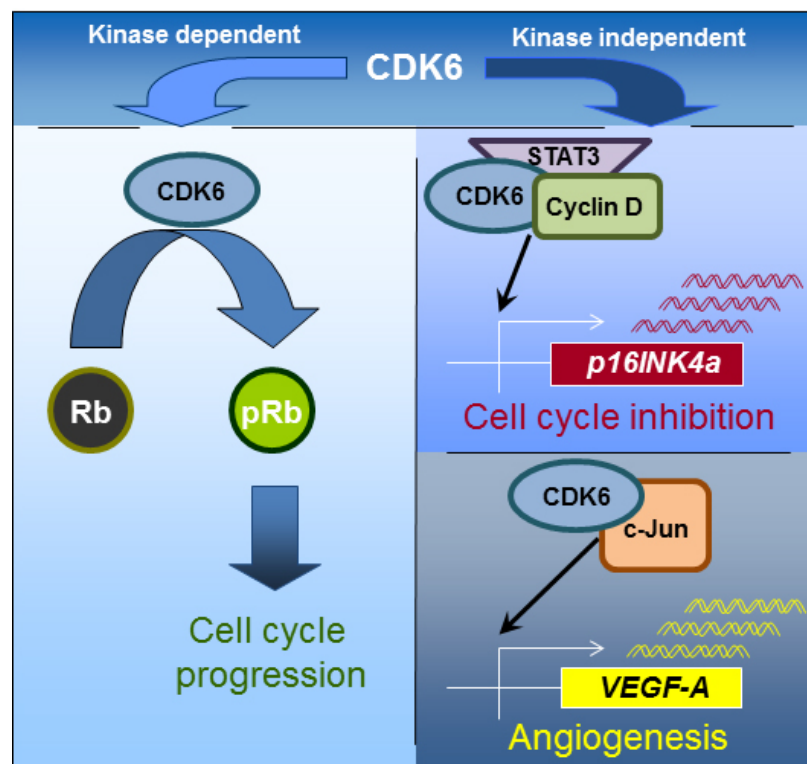


The antibody CD31 (angiogenesis marker), indicates the presence of blood vessels, highlighted in red, in the tumor tissue. If the protein CDK6 is present (left image), it triggers blood vessel growth. Without CDK6 (middle image), the blood vessels density is lower. When the kinase activity of CDK6 is switched off (right image), the protein can still stimulate blood vessel growth.



The current study shows that CDK6 has two different working mechanisms: a kinase-dependent one, that controls cell growth and a kinase-independent one that can inhibit the cell division and stimulates blood vessel growth.

*„A new kinase-independent function of CDK6 links the cell cycle to tumor angiogenesis“, Karoline Kollmann, Gerwin Heller, Christine Schneckenleithner, Wolfgang Warsch, Ruth Scheicher, Rene G. Ott, Markus Schäfer, Sabine Fajmann, Michaela Schleder, Ana-Iris Schiefer, Ursula Reichart, Matthias Mayerhofer, Christoph Hoeller, Sabine Zochbauer-Mueller, Donscho Keraschki, Christoph Bock, Lukas Kenner, Gerald Hoefler, Michael Freissmuth, Anthony R. Green, Richard Moriggl, Meinrad Busslinger, Marcos Malumbres, Veronika Sexl. Cancer Cell 2013*