







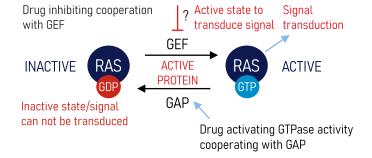
Proteins to test oncogene RAS mutants activity

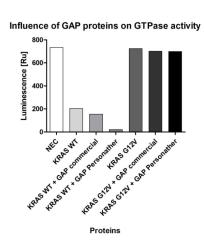
GAP protein for RAS activity testing

The RAS oncogene is one of the most important. It is possible to test its enzymatic (GTPase) activity, including its mutants such as K-RASG12V, G12D and G12C. These genes are mutated in pancreatic, colon and lung cancer. Testing molecules that influence the GTPase activity of this protein requires the simultaneous use of the GAP protein. Without it, the GTPase activity of RAS is minimal. Our GAP protein was tested in RASWT, RASG12V and G12D in vitro analyses and showed adequate ability to increase GTPase activity.

RASWT, RASG12V GTPase activities analysis

Mechanism of RAS GTPase activation GAP enhances hydrolysis of GTP





RASG12V was inactive in both the presence and the absence of the GAP. RASWT showed the GTPase activity. The tested compound was unable to restore RASG12V GTPase activity.

