

## c-Oncogene Antibody Sampler Kit

<b>Catalog No.</b>	E-AB-K1677	<b>Reactivity</b>	Human
<b>Storage</b>	Store at -20°C, Avoid freeze / thaw cycles	<b>Applications</b>	WB
<b>Buffer</b>	PBS with sodium azide and glycerol.	<b>Dilution</b>	1:500-1:2000

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

Included	Product	Isotype	Mol. Wt.	Size
E-AB-30898		IgG	41kDa	20µL
E-AB-30709		IgG	123kDa	20µL
E-AB-30509		IgG	40kDa	20µL
E-AB-30933		IgG	117kDa	20µL
E-AB-30975	c-Myc Polyclonal Antibody	Rabbit IgG	50-60kDa	20µL
E-AB-32727		IgG	73kDa	20µL
E-AB-32152	N/H/K-Ras Polyclonal Antibody	Rabbit IgG	21kDa	20µL
E-AB-31030		IgG	68kDa	20µL
E-AB-31047		IgG	60kDa	20µL
E-AB-1003	Goat Anti-Rabbit IgG(H+L)(peroxidase/HRP conjugated)	Goat		120µL

### Product Description

The c-Oncogene Antibody Sampler Kit provides an economical means of evaluating total levels of various oncogenic proteins. The kit contains enough primary and secondary antibodies to perform two Western blot experiments.

Please visit [www.elabscience.com](http://www.elabscience.com) for validation data and a complete listing of recommended companion products.

### Background

The regulation of cell growth, differentiation and programmed death is coordinated by several sets of proteins that comprise essential signal transduction pathways. Many of these key regulatory proteins are encoded by proto-oncogenes, which can be activated (altered) to change the typical cell program to one of abnormal cell growth and unregulated development. Proteins encoded by proto-oncogenes include growth factors and other ligands, receptor proteins, tyrosine kinases, various regulatory proteins (i.e. GTPases) and transcription factors. Together these proteins comprise the basic elements of cell signaling pathways; altered expression or mutation of one or more of these components can lead to oncogenic growth. Non-receptor (i.e. cytoplasmic, nuclear) tyrosine kinases such as c-Abl and Src play key roles in the regulation of cell proliferation, differentiation, apoptosis, cell adhesion and stress responses. Alteration of the corresponding c-Abl and Src proto-oncogenes is associated with oncogenesis; Abl1-BCR gene translocations result in chronic myelogenous leukemia (CML) while constitutively active Src is seen in some patients with colon cancer and altered Src expression is seen in a wide array of cancers. Regulation of Raf tyrosine kinase by Ras GTPase controls downstream kinases in the MEK/MAPK signaling pathway. Activation of the Ras and Raf proto-oncogenes are common in human cancers and both proteins are seen as potential therapeutic targets. The receptor tyrosine kinase c-Kit plays a critical role in activation and growth of hematopoietic stem cells; mutations that inhibit c-Kit kinase activity are associated with a variety of developmental disorders while mutations producing constitutively active c-Kit can result in mastocytosis and gastrointestinal stromal tumors. The alteration of key transcription factors such as c-Fos, c-Jun, c-Myc and c-Rel that are normally responsible for regulating cell and tissue growth, differentiation and the inflammation/immune response, can also result in unregulated, oncogenic cell growth.

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