

# Rabbit Anti-phospho-CRK (Ser41) antibody

SL5264R

phospho-CRK (Ser41)
磷酸化CRK抗体
p-CRK(phospho-Ser41); p-CRK(phospho-S41); CRK CRK isoform 2; CRK isoform II; CRKII; p38; Proto oncogene C crk; v crk avian sarcoma virus CT10 oncogene homolog ; v crk sarcoma virus CT10 oncogene homolog; v crk sarcoma virus CT10 oncogene homolog (avian); Adapter molecule crk; Avian sarcoma virus CT10 (v crk) oncogene homolog; CRK_HUMAN.
Rabbit
Polyclonal
Human,Mouse,Rat,Dog,Pig,Horse,Rabbit,Sheep,
WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
34kDa
cytoplasmicThe cell membrane
Lyophilized or Liquid
1mg/ml
KLH conjugated Synthesised phosphopeptide derived from human CRK around the phosphorylation site of Ser41:DS(p-S)TS
IgG
affinity purified by Protein A
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed
This gene encodes a member of an adapter protein family that binds to several tyrosine-

phosphorylated proteins. The product of this gene has several SH2 and SH3 domains (src-homology domains) and is involved in several signaling pathways, recruiting cytoplasmic proteins in the vicinity of tyrosine kinase through SH2-phosphotyrosine interaction. The N-terminal SH2 domain of this protein functions as a positive regulator of transformation whereas the C-terminal SH3 domain functions as a negative regulator of transformation. Two alternative transcripts encoding different isoforms with distinct biological activity have been described.

#### Function:

The Crk-I and Crk-II forms differ in their biological activities. Crk-II has less transforming activity than Crk-I. Crk-II mediates attachment-induced MAPK8 activation, membrane ruffling and cell motility in a Rac-dependent manner. Involved in phagocytosis of apoptotic cells and cell motility via its interaction with DOCK1 and DOCK4. May regulate the EFNA5-EPHA3 signaling.

#### Subunit:

Interacts with ABL1, C3G, SOS, MAP4K1, MAPK8 and DOCK3 via its first SH3 domain. Interacts (via SH2 domain) with BCAR1, CBL, CBLB, PXN, IRS4 and GAB1 upon stimulus-induced tyrosine phosphorylation. Interacts (via SH2 domain) with several tyrosine-phosphorylated growth factor receptors such as EGFR and INSR. Interacts with FLT1 (tyrosine-phosphorylated) (By similarity). Interacts with DOCK1 and DOCK4. Interacts with SHB. Interacts with PEAK1. Interacts with FASLG. Isoform Crk-II interacts with KIT. Interacts with EPHA3; upon activation of EPHA3 by the ligand EFNA5 and EPHA3 tyrosine kinase activity-dependent. Interacts with EPHA3 (phosphorylated); mediates EFNA5-EPHA3 signaling through RHOA GTPase activation. Interacts with FLT4 (tyrosine-phosphorylated). Isoform Crk-II (via SH2 domain) interacts with PDGFRA (tyrosine phosphorylated) and PDGFRB (tyrosine phosphorylated). Part of a collagen stimulated complex involved in cell migration composed of CDC42, CRK, TNK2 and p130cas/BCAR1. Interacts (via SH2 domain) with the 'Tyr-9' phosphorylated form of PDPK1.

## **Subcellular Location:**

Cytoplasm. Cell membrane. Note=Translocated to the plasma membrane upon cell adhesion.

### **Post-translational modifications:**

Phosphorylation of Crk-II (40 kDa) gives rise to a 42 kDa form. Isoform Crk-II is phosphorylated by KIT.

Phosphorylated on Tyr-221 upon cell adhesion. Results in the negative regulation of the association with SH2- and SH3-binding partners, possibly by the formation of an intramolecular interaction of phosphorylated Tyr-221 with the SH2 domain. This leads finally to the down-regulation of the Crk signaling pathway.

Proline isomerization at Pro-237 by PPIA acts as a switch between two conformations: an autoinhibitory conformation in the cis form, where the tandem SH3 domains interact intramolecularly, and an activated conformation in the trans form.

# Similarity: Belongs to the CRK family. Contains 1 SH2 domain. Contains 2 SH3 domains. SWISS: P46108 Gene ID: 1398 piotecn.com Database links: Entrez Gene: 1398Human Entrez Gene: 12928Mouse Entrez Gene: 54245Rat Omim: 164762Human SwissProt: P46108Human SwissProt: Q96GA9Human SwissProt: Q96HJ0Human SwissProt: Q64010Mouse SwissProt: Q63768Rat Unigene: 638121Human Unigene: 280125Mouse Unigene: 96136Rat **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

