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Rabbit Anti-phospho-CRK (Tyr221) antibody

SL3121R

Product Name:	phospho-CRK (Tyr221)
Chinese Name:	磷酸化Crk p38抗体
Alias:	Crk p38 (phospho Y221); p-Crk p38 (phospho Y221); p-CRK(phospho-Tyr221); p-CRK(phospho-Y221); Crk p38; 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
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Horse,Rabbit,
Applications:	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.
Molecular weight:	38kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human Crk p38 around the phosphorylation site of Tyr221:GP(p-Y)AQ
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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:	PubMed

Product Detail:	Crk p38 (CrkII) is an isoform of the protein Crk. CrkI and CrkII are produced from the same crk gene by alternative splicing. The two isoforms differ in their biological activities with CrkII having less transforming activity than CrkI. Crk p38 is a member of an adapter protein family that binds to several tyrosine-phosphorylated proteins. It 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. Crk is believed to be a regulator of invasive responses because increased levels of the protein have been observed in multiple human cancers. In vivo studies have demonstrated that decreased levels of Crk remarkably inhibits tumor formation and its invasive growth. **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

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.