10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CRK Recombinant Rabbit mAb

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Catalog # AP94824

Product Information

Application	WB, IP
Primary Accession	P46108
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Recombinant
Calculated MW	33831
Physical State	Liquid
Immunogen	A synthesized peptide derived from human CRK
Epitope Specificity	1-50/304
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Cell membrane. Note=Translocated to the plasma membrane upon cell adhesion.
SIMILARITY	Belongs to the CRK family. Contains 1 SH2 domain. Contains 2 SH3 domains.
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.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	1398
Other Names	Adapter molecule crk, Proto-oncogene c-Crk, p38, CRK
Dilution	WB=1:500-2000,ICC/IF=1:50-200,IP=1:20-50,Flow-Cyt=1:50-100
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

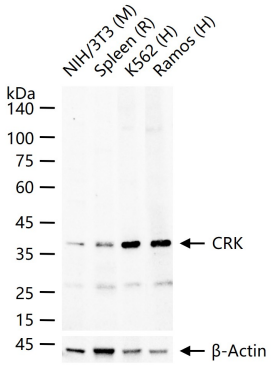
Protein Information

Name	CRK
Function	Involved in cell branching and adhesion mediated by BCAR1- CRK-RAPGEF1 signaling and activation of RAP1.
Cellular Location	Cytoplasm. Cell membrane. Note=Translocated to the plasma membrane upon cell adhesion.

Background

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.

Images



25 ug total protein per lane of various lysates (see on figure) probed with CRK monoclonal antibody, unconjugated (AP94824) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.