

Crk II (phospho Tyr221) Polyclonal Antibody

Catalog No: YP0527

Reactivity: Human; Mouse; Rat; Monkey

Applications: WB;IF;ELISA

Target: Crk II

Fields: >>MAPK signaling pathway;>>ErbB signaling pathway;>>Rap1 signaling

pathway;>>Chemokine signaling pathway;>>Focal adhesion;>>Fc gamma R-mediated phagocytosis;>>Neurotrophin signaling pathway;>>Regulation of actin cytoskeleton;>>Insulin signaling pathway;>>Growth hormone synthesis, secretion and action;>>Bacterial invasion of epithelial cells;>>Shigellosis;>>Yersinia

infection;>>Human cytomegalovirus infection;>>Human immunodeficiency virus 1

 $infection; >> Pathways \ in \ cancer; >> MicroRNAs \ in \ cancer; >> Renal \ cell$

carcinoma;>>Chronic myeloid leukemia

Gene Name: CRK

Protein Name: Adapter molecule crk

P46108

Q64010

Human Gene Id: 1398

Human Swiss Prot

No:

Mouse Gene Id: 12928

Mouse Swiss Prot

No:

Rat Gene Id: 54245

Rat Swiss Prot No: Q63768

Immunogen: The antiserum was produced against synthesized peptide derived from human

CrkII around the phosphorylation site of Tyr221. AA range:187-236

Specificity: Phospho-Crk II (Y221) Polyclonal Antibody detects endogenous levels of Crk II

protein only when phosphorylated at Y221.



Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:40000. Not yet tested in other

applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 40kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;ErbB_HER;Chemokine;Focal

adhesion;Fc gamma R-mediated phagocytosis;Neurotrophin;Regulates Actin and

Cytoskeleton;Insulin Receptor;Pathways in cancer;Renal cell carcinoma

Background: 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. [provided by RefSeq, Jul 2008],

Function: domain: The C-terminal SH3 domain function as a negative modulator for

transformation and the N-terminal SH3 domain appears to function as a positive regulator for transformation.,domain:The SH2 domain mediates interaction with SHB.,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.,PTM: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

regulation of the Crk signaling pathway.,PTM:P

Subcellular Location:

 $\label{lem:cytoplasm} \textbf{Cytoplasm} \ \textbf{.} \ \textbf{Cell membrane} \ \textbf{.} \ \textbf{Translocated to the plasma membrane upon cell}$

phosphorylated Tyr-221 with the SH2 domain. This leads finally to the down-

adhesion..



Expression : Embryonic lung, Epithelium, Eye, Lung, Placenta,

Sort : 4570

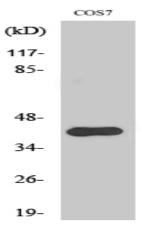
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No4: 1

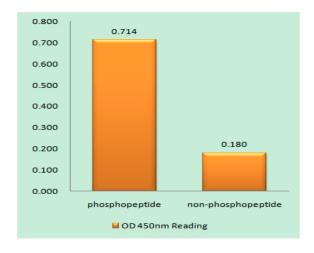
Host: Rabbit

Modifications : Phospho

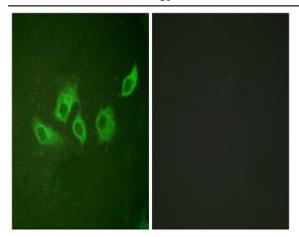
Products Images



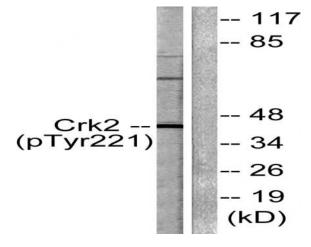
Western Blot analysis of various cells using Phospho-Crk II (Y221) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CrkII (Phospho-Tyr221) Antibody



Immunofluorescence analysis of HUVEC cells, using CrkII (Phospho-Tyr221) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells, using CrkII (Phospho-Tyr221) Antibody. The lane on the right is blocked with the phospho peptide.