

## **Crk II Monoclonal Antibody**

Catalog No: YM0167

Reactivity: Human

**Applications:** WB;IHC;IF;FCM;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

Human Gene Id: 1398

**Human Swiss Prot** 

No:

Mouse Swiss Prot Q64010

No:

Immunogen: Purified recombinant fragment of human Crk II expressed in E. Coli.

**Specificity:** Crk II Monoclonal Antibody detects endogenous levels of Crk II protein.

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

Source: Monoclonal, Mouse

**Dilution:** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry:

1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.

Affinity purification



**Btorfaget Btability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 34kD

**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

P References: 1. Seikagaku. 2009 May;81(5):361-76.

2. Mol Cancer Res. 2009 Sep;7(9):1582-92.

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

regulation of the Crk signaling pathway., PTM:P

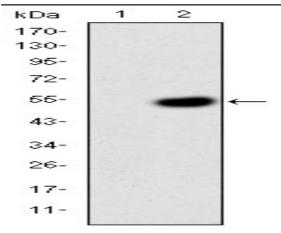
Subcellular Location :

Cytoplasm . Cell membrane . Translocated to the plasma membrane upon cell

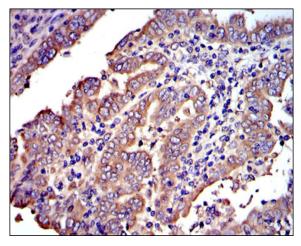
adhesion...

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

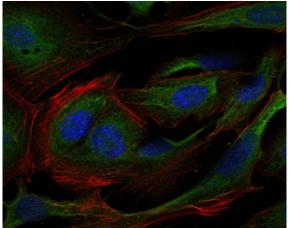
## **Products Images**



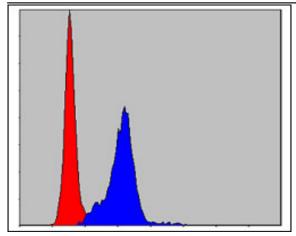
Western Blot analysis using Crk II Monoclonal Antibody against HEK293 (1) and CRK-hlgGFc transfected HEK293 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded intima cancer tissues with DAB staining using Crk II Monoclonal Antibody.



Immunofluorescence analysis of 3T3-L1 cells using Crk II Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Hela cells using Crk II Monoclonal Antibody (blue) and negative control (red).

