# abcam

### Product datasheet

## Anti-Crk p38 antibody [EP242Y] ab45136



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#### Overview

**Product name** Anti-Crk p38 antibody [EP242Y]

**Description** Rabbit monoclonal [EP242Y] to Crk p38

**Host species** Rabbit

**Tested applications** Suitable for: WB, ICC/IF, Flow Cyt (Intra)

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: K-562, C6, and NIH/3T3 whole cell lysates. ICC/IF: HepG2 cells. Flow Cyt (Intra): HeLa cells.

**General notes** This product has switched from a hybridoma to recombinant production method on 9th June 2023.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS

**Purity** Protein A purified

Monoclonal Clonality Clone number **EP242Y** 

Isotype ΙgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab45136 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes	
WB	****(1)	1/1000. Detects a band of approximately 37 kDa (predicted molecular weight: 34 kDa).	
ICC/IF		1/50.	
Flow Cyt (Intra)		1/50.	

**Application notes** 

Is unsuitable for Flow Cyt or IP.

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**Function** The 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.

**Sequence similarities**Belongs to the CRK family.

Contains 1 SH2 domain. Contains 2 SH3 domains.

**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.

The SH2 domain mediates interaction with SHB.

**Post-translational** Phosphorylation of Crk-II (40 kDa) gives rise to a 42 kDa form.

modifications Phosphorylated on Tyr-221 upon cell adhesion. Results in the negative regulation of the

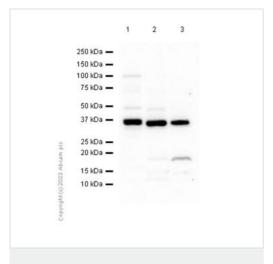
association with SH2- and SH3-binding partners, possibly by the formation of an intramolecular interaction of phosphorylated Tire 221 with the SH2 demain. This leads finally to the days.

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

regulation of the Crk signaling pathway.

**Cellular localization** Cytoplasm. Cell membrane. Translocated to the plasma membrane upon cell adhesion.

#### **Images**



Western blot - Anti-Crk p38 antibody [EP242Y] (ab45136)

**All lanes :** Anti-Crk p38 antibody [EP242Y] (ab45136) at 1/1000 dilution

**Lane 1**: K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 2: C6 (Rat glial tumor glial cell) whole cell lysate

Lane 3: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

Lysates/proteins at 15 µg per lane.

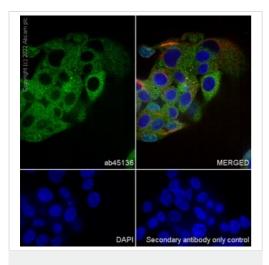
#### Secondary

**All lanes :** Goat Anti-Rabbit  $\lg G$  H&L (HRP) ( $\underline{ab97051}$ ) at 1/20000 dilution

**Predicted band size:** 34 kDa **Observed band size:** 37 kDa

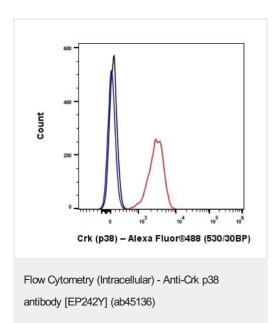
Exposure time: 40 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Crk p38 antibody [EP242Y] (ab45136)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HepG2 cells labelling Crk with ab45136 at 1/50 dilution. Confocal image showing cytoplasmic and membranous staining in subsets of HepG2 cells. <a href="mailto:ab195889">ab195889</a> AlexaFluor® 594-conjugated Anti-alpha Tubulin was used to counterstain tubulin at 1/200 dilution. The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is <a href="mailto:ab150081">ab150081</a> Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.



Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa cells labelling Crk with ab45136 at 1/50 dilution (Red) compared with an isotype control (Black) and an unlabelled control (Cell without incubation with primary antibody and secondary antibody (Blue)). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) was used as the secondary antibody.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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