

Product Data Sheet: Purified anti-phospho-CrkL (Tyr207) rabbit mAb

Catalog Number:	2091
Clone:	CrkLY207-G4
Isotype:	Rabbit IgG1κ
Immunogen:	A synthetic phospho-peptide corresponding to residues surrounding Tyr207 of human phospho CrkL
Reactivity:	Mouse, Human
Cross Reactivity:	Predicted to work with mouse, rat, and other homologues.
Preparation:	Protein A+G
Formulation:	1X PBS, 0.02% NaN ₃ , 50% Glycerol, 0.1% BSA
Applications:	WB, Flow Cytometry
Recommended Usage:	1.0 - 0.1 µg/ml. Optimum concentration should be determined by the user.
Product Configuration:	200 ul (0.5mg/ml, more than 200 western blots)
Detection:	Anti-Rabbit IgG

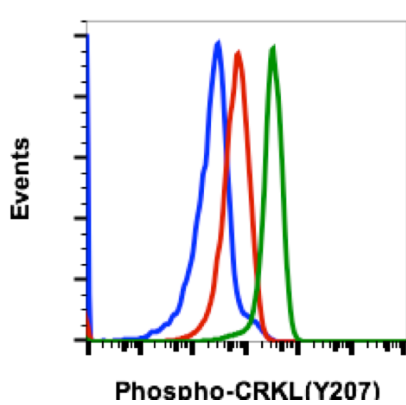
Description

CrkL (CRK Like Proto-Oncogene, Adaptor Protein), which is a V-crk avian sarcoma virus CT10 oncogene homolog-like adapted protein of CRK family, belongs to a novel class of regulatory proteins which include v-Crk and its cellular homologs Crk I and Crk II. Protein structure of CrkL contains several SH2 and SH3 domains. Phospho CrkL plays a central role in cell proliferation, cell adhesion, migration and phagocytic and endocytic pathways (1). Dysfunction of CRKL plays key roles in a variety of human diseases including human malignancies, e.g. chronic myelogenous leukemia, colon cancer and prostate cancer (2-5). Phospho CrkL is known to regulate signaling through interactions of its SH3 domain with proline-rich motif containing proteins, such as SOS, C3G, and p85. In CrkL-induced cell transformation, CrkL association with these proteins and activates SOS1-RAS-RAF-ERK and Src-C3G-RAP1 signaling pathways. The SH2 and SH3 domains associate with effector proteins containing phosphorylated tyrosine (pTyr)-Xaa-Xaa-Pro and Pro-Xaa-Xaa-Pro motifs respectively. The SH3 domains are separated by a linker containing Tyr207 which is phosphorylated by Abl tyrosine kinase.

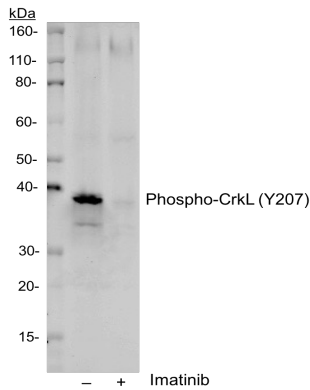
References

1. Wang J, et al. (2013) Chemico-biological interactions. 206: 230–8.
2. Ungewiss C, et al. (2016) Scientific reports. 6:18652.
3. Birge RB, et al. (2009) Cell communication and Signaling: CCS. 7:13. 3
4. Panigrahi S, et al. (2012) PLOS ONE. 7:e28395,
5. Singer CF, et al. (2006) Oncol. Rep. 15: 353-9.

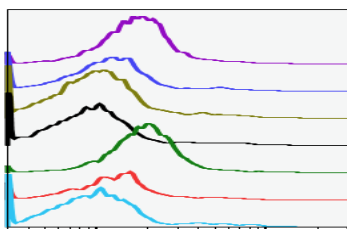
Purified anti-phospho-CrkL (Tyr207) rabbit mAb Images



Flow cytometric analysis of K562 cells, secondary antibody only negative control (blue) or imatinib (red) or treated with pervanadate (green) using Phospho-CrkL (Tyr207) antibody CrkLY207-G4 at 0.05 µg/mL. Cat. #2091.

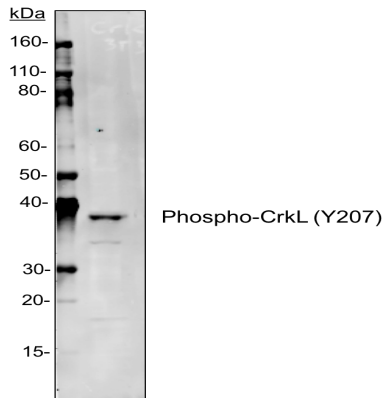


Western blot analysis of K562 cell extract, untreated or treated with imatinib using 1ng/mL CrkL (Tyr207) antibody CrkLY207-G4. Cat. #2091.

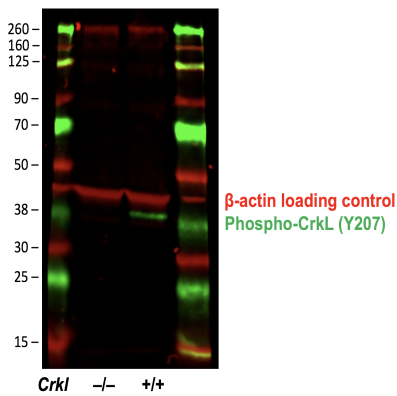


Peptide blocking flow cytometric analysis of K562 cells, secondary antibody only negative control (light blue) or treated with imatinib (red) or treated with pervanadate (green) or imatinib and blocked with phospho-peptide (black) or pervanadate and blocked with phospho peptide (gold) or imatinib and blocked with non-phospho peptide (dark blue) or pervanadate and blocked with non-phospho peptide (purple) using Phospho-CrkL (Tyr207) antibody CrkLY207-G4 at 0.01µg/mL. Cat. #2091.

SampleID	Median : BL1-A
Pv G4 N	1712
Imat G4 N	1165
Pv G4 P	961
Imat G4 P	870
Pv G4	1897
Imat G4	1272
Imat 2' only	963



Western blot analysis of NIH3T3 cell extract using 1 μ g/mL Phospho-CrkL (Tyr207) antibody CrkLY207-G4. Cat. #2091.



Western blot of E10.5 mouse wild-type (+/+) or Crkl knock out (-/-) whole embryos. The red channel was stained using a β -actin loading control, and the green channel was stained using 1:500 dilution of Phospho-CrkL (Tyr207) antibody CrkLY207-G4 Cat. #2091. Phospho CrkL antibody staining is absent in the knock out lysate.