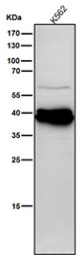
Phospho-CrkL (Tyr207) Antibody / Crk like protein [clone 32C08] (FY12948)

Catalog No.	Formulation	Size
FY12948	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

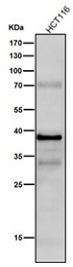
Recombinant RABBIT MONOCLONAL

Bulk quote request

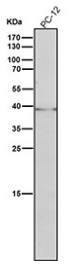
Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	32C08
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P46109
Applications	Western Blot : 1:500-1:2000
Limitations	This Phospho-CrkL (Tyr207) antibody is available for research use only.



Human K562 cell lysate tested with the Phospho-CrkL (Tyr207) antibody at 1:1000 dilution for 1 hour at room temperature. A tight doublet is detected at ~40 kDa in K562 cells, running above the ~34 kDa predicted mass. The upward shift and doublet pattern are consistent with mono- and hyper-phosphorylated CrkL species, which migrate slower on SDS-PAGE than total CrkL.



Human HCT116 cell lysate tested with the Phospho-CrkL (Tyr207) antibody at 1:1000 dilution for 1 hour at room temperature. A predominant band is detected at ~40 kDa, running above the ~34 kDa prediction, consistent with phosphorylation-dependent mobility of CrkL. Minor higher bands are nonspecific background commonly observed with phospho antibodies.



Rat PC-12 lysate tested with the Phospho-CrkL (Tyr207) antibody at 1:1000 dilution for 1 hour at room temperature. Predicted molecular weight ~34 kDa. The upward shift is consistent with phosphorylated CrkL species, which migrate slower on SDS-PAGE than total CrkL.

Description

Phospho-CrkL (Tyr207) antibody detects the phosphorylated form of Crk like protein, encoded by the CRKL gene. Crk like is an adaptor protein that mediates intracellular signaling downstream of multiple tyrosine kinases, including BCR ABL, EGFR, and PDGFR. It contains SH2 and SH3 domains that allow it to bind phosphotyrosine residues and recruit effector proteins, thereby linking receptor activation to downstream pathways. Phosphorylation at tyrosine 207 is a regulatory modification that influences Crk like protein interactions and signaling capacity. Phospho-CrkL (Tyr207) antibody provides researchers with a reliable reagent to study tyrosine kinase signaling in normal and malignant cells.

Crk like phosphorylation at tyrosine 207 is mediated by kinases such as ABL and has been shown to modulate protein conformation and adaptor activity. Research using Phospho-CrkL (Tyr207) antibody has demonstrated that phosphorylation reduces binding to certain partners while promoting interactions with negative regulators, thus acting as a feedback mechanism to control signaling intensity. This fine tuning ensures that pathways such as Ras, Rac, and PI3K are activated appropriately in response to growth factor stimulation or stress signals.

Aberrant phosphorylation of Crk like at tyrosine 207 has been strongly associated with leukemia, particularly chronic myeloid leukemia, where BCR ABL fusion kinase constitutively phosphorylates this residue. Phospho-CrkL (Tyr207) antibody has therefore become a surrogate marker for BCR ABL activity in both research and clinical contexts. Monitoring Crk like phosphorylation provides a sensitive measure of kinase inhibition in patients treated with tyrosine kinase inhibitors, making it a valuable biomarker for therapeutic response. Beyond leukemia, altered phosphorylation has been observed in solid tumors, linking Crk like to diverse oncogenic pathways.

Phospho-CrkL (Tyr207) antibody is used in western blotting, immunoprecipitation, and flow cytometry. Western blotting provides detection of phosphorylated protein as an indicator of kinase activity. Immunoprecipitation with this antibody isolates Crk like protein complexes, allowing characterization of binding partners under different phosphorylation states. Flow cytometry applications extend its use to patient samples, where phosphorylation levels can be measured at the single cell level. These diverse applications demonstrate the versatility of Phospho-CrkL (Tyr207) antibody in both laboratory research and translational medicine.

By providing Phospho-CrkL (Tyr207) antibody, NSJ Bioreagents supports research into tyrosine kinase signaling, cancer biology, and therapeutic monitoring. Detection of Crk like phosphorylation at tyrosine 207 offers a powerful means of understanding adaptor protein regulation and its impact on cellular behavior.

Application Notes

Optimal dilution of the Phospho-CrkL (Tyr207) antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Phospho-CrkL (Y207) was used as the immunogen for the Phospho-CrkL (Tyr207) antibody.

Storage

Store the Phospho-CrkL (Tyr207) antibody at -20oC.