

Anti-Crk II (Tyr-221), Phosphospecific Antibody Catalog # AN1727

Specification

Anti-Crk II (Tyr-221), Phosphospecific Antibody - Product Information

Primary Accession Reactivity Host Clonality Isotype Calculated MW

P46108 Bovine, Chicken, Drosophila, C.Elegans Rabbit Rabbit Polyclonal IgG 33831

Anti-Crk II (Tyr-221), Phosphospecific Antibody - Additional Information

Gene ID Other Names cCrk, c-CRK 1398

Target/Specificity

The Crk family of adaptor proteins (Crk I, Crk II and CrkL) are Src Homology 2 (SH2) and Src Homology 3 (SH3) domain-containing proteins that form protein complexes important for transmiting signals downstream of tyrosine kinases. Both Crk II and CrkL are composed of a single SH2 domain, followed by two tandem SH3 domains. Crk II is also alternatively spliced to a minor product, Crk I, which is structurally and functionally more similar to the v-Crk oncogene. Both Crk II and CrkL are ubiquitously expressed and their SH domains are highly homologous, however both are required for mouse development and have distinct non-overlapping phenotypes in knockout mice. Phosphorylation may be important for regulating Crk activity. Crk II Tyr-221 (CrkL Tyr-207) phosphorylation is a negative regulatory site, while Crk Tyr-251 phosphorylation in the SH3 domain is a positive regulatory site. EGF stimulation induces phosphorylation of Tyr-251, which increases binding of Crk to the SH2 domain of Abl, and promotes transactivation of Abl.

Format Antigen Affinity Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-Crk II (Tyr-221), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

Anti-Crk II (Tyr-221), Phosphospecific Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.



- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Crk II (Tyr-221), Phosphospecific Antibody - Images



Western blot of human K562 cells stimulated with pervanadate (1 mM) for 30 min. (lanes 1-4). The blot was treated with alkaline phosphatase to dephosphorylate Crk II (lanes 2 & 4), then the blot was probed with mouse monoclonal Crk II (C-terminal region) CM3321 (lanes 1 & 2) and Crk II (Tyr-221) phospho-specific CP4701 (lanes 3 & 4).

Anti-Crk II (Tyr-221), Phosphospecific Antibody - Background

The Crk family of adaptor proteins (Crk I, Crk II and CrkL) are Src Homology 2 (SH2) and Src Homology 3 (SH3) domain-containing proteins that form protein complexes important for transmiting signals downstream of tyrosine kinases. Both Crk II and CrkL are composed of a single SH2 domain, followed by two tandem SH3 domains. Crk II is also alternatively spliced to a minor product, Crk I, which is structurally and functionally more similar to the v-Crk oncogene. Both Crk II and CrkL are ubiquitously expressed and their SH domains are highly homologous, however both are required for mouse development and have distinct non-overlapping phenotypes in knockout mice. Phosphorylation may be important for regulating Crk activity. Crk II Tyr-221 (CrkL Tyr-207) phosphorylation is a negative regulatory site, while Crk Tyr-251 phosphorylation in the SH3 domain is a positive regulatory site. EGF stimulation induces phosphorylation of Tyr-251, which increases binding of Crk to the SH2 domain of Abl, and promotes transactivation of Abl.