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Product Information

Anti-CIN85

produced in rabbit, affinity isolated antibody

Catalog Number **C6115**

Product Description

Anti-CIN85 is developed in rabbit using a synthetic peptide corresponding to amino acids 650-665 of human CIN85, conjugated to KLH via an N-terminal added cysteine residue, as immunogen. The sequence is conserved in mouse and rat CIN85. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-CIN85 recognizes CIN85 by immunoblotting (approx 80 kDa). Staining of the CIN85 band is specifically inhibited by the immunizing peptide.

Binding of growth factors to receptor tyrosine kinases (RTKs) promotes receptor activation, leading to autophosphorylation and phosphorylation of numerous cellular proteins. Ultimately, signaling networks that mediate proliferative and differentiating signals are formed.¹ After their activation, RTKs are rapidly removed from the cell surface, in a process dependent on receptor ubiquitination and interaction with endocytic proteins.^{2,3} The protooncogene c-Cbl, and CIN85, are among the main players in this process.^{4,5} CIN85 (also known as Cbl-interacting protein, SH3KBP1 or previously known as Ruk or SETA) is a 665 amino acid protein. Its function in the process of endocytosis became known after its isolation in a search for c-Cbl interacting proteins.⁵ CIN85 belongs to the CIN85/CMS family of adaptor molecules, characterized by containing three SH3 domains, a proline-rich region and a coiled-coil domain.⁶⁻⁸ The different members of the family orchestrate a network involved in downregulation and degradation of RTKs.⁶ In the case of EGF receptor turnover, activation involves recruitment of CIN85-endophilin complexes to mediate receptor internalization. Association of endophilins is a critical step; their translocation to the vicinity of active EGF receptors promote membrane, and therefore receptor invagination.⁹ Once internalized, RTKs are delivered into the endosomal compartment where receptors get sorted for either recycling back to the cell surface or are targeted to lysosomes for degradation.^{9,10}

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a minimum working concentration of 0.5-1.0 µg/ml is determined using extracts of NIH3T3 cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentrations by titration test.

References

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