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CIB (m): 293T Lysate: sc-126638

BACKGROUND

Platelets regulate the function of Integrin $\alpha 2b/\beta 3$ (GPIIb/IIIa), the platelet Fibrinogen receptor, which is involved in the binding of proteins to integrin cytoplasmic domains. A novel protein, CIB, for calcium- and integrin-binding protein (also designated as Kip for kinase interacting protein, SIP2-28 and DNA-PK_{cs} interacting protein), binds specifically at the cytoplasmic domain of $\alpha 2b$ by a number of positively charged residues in its binding site. Binding of CIB to the $\alpha 2b$ is affected by fluctuations in the intracellular calcium concentration. In aggregated platelets, endogenous CIB and $\alpha 2b/\beta 3$ translocate to the Triton X-100-insoluble cytoskeleton, demonstrating that the cellular localization of CIB is regulated. CIB also binds to DNA-PK_{cs}, which is a nuclear protein serine/threonine kinase that plays a role in the DNA repair and recombination process of lymphoid development. Fnk also binds to the CIB, suggesting that CIB may be a regulatory subunit of polo-like kinases. CIB shows significant homology to calcineurin B and calmodulin, and its mRNA levels are ubiquitously expressed in various human tissues.

REFERENCES

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4. Seki, N., et al. 1999. Structure, expression profile, and chromosomal location of an isolog of DNA-PK_{cs} interacting protein (Kip) gene. *Biochim. Biophys. Acta* 1444: 143-147.
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6. Hattori, A., et al. 2000. Genomic structure of mouse and human genes for DNA-PK_{cs} interacting protein (Kip). *DNA Seq.* 10: 415-418.
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CHROMOSOMAL LOCATION

Genetic locus: Cib1 (mouse) mapping to 7 D3.

PRODUCT

CIB (m): 293T Lysate represents a lysate of mouse CIB transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

CIB (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CIB antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.