

Eps8 (583-821): sc-4236 WB

BACKGROUND

Elucidation of the mechanism by which receptor tyrosine kinases (RTKs) modulate cellular physiology in response to stimuli is critical to the understanding of growth regulation. Miscues in RTK signaling pathways can result in cellular transformation and ultimately in cancer. Two novel EGF receptor substrates, designated EGF-receptor pathway substrates 8 and 15, or Eps8 and Eps15, have been described. Eps8 and Eps15 are 97 kDa and 142 kDa proteins, respectively, that become tyrosine phosphorylated subsequent to EGF stimulation. Overexpression of Eps15 in NIH/3T3 cells causes cellular transformation, implying involvement in the regulation of cell proliferation. Eps15 is capable of binding the amino terminal portion of Crk via a conserved proline-rich domain characteristic of all Crk binding proteins. Overexpression of Eps8 in both fibroblasts and hematopoietic cells results in an increased mitogenic response to EGF. Eps8 has been shown to associate with the EGF receptor despite its lack of a functional SH2 domain. Further characterization suggests the protein has both a PH domain and a SH3 domain, the functional significance of which is not yet known.

REFERENCES

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SOURCE

Eps8 (583-821) is expressed in *E. coli* as a 50 kDa tagged fusion protein corresponding to amino acids 583-821 mapping at the carboxy terminus of Eps8 of mouse origin.

PRODUCT

Eps8 (583-821) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

Eps8 (583-821) is suitable as a Western blotting control for sc-1841.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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