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## Produktinformation



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Diagnostik & molekulare Diagnostik



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### Zuschläge

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- Gefahrgutzuschlag
- Expressversand

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# GRB14 (h): 293T Lysate: sc-116539

## BACKGROUND

Many growth factors function by binding receptors with intrinsic tyrosine kinase activity. Signaling by such receptors involves a series of intermediates characterized by SH2 domains that bind tyrosine phosphorylated receptors by a direct interaction between the SH2 domain and specific phospho-tyrosine-containing receptor sequences. GRB7, a SH2 domain protein, has a single SH2 domain at its C-terminal, a central region with similarity to Ras GAP and a proline-rich N-terminus. A related SH2 domain-containing protein, GRB10, exhibits a high degree of homology with GRB7. GRB10 undergoes serine but not tyrosine, phosphorylation in response to EGF treatment, but appears to poorly bind to the EGF receptor. An additional member of the GRB7 family, designated GRB14, contains a Pleckstrin homology domain in its central region and a carboxy terminal SH2 domain. GRB14 mRNA is expressed at high levels in a broad range of tissues including liver, kidney, pancreas, testis, ovary, heart and skeletal muscle. Expression of the GRB14 protein in breast carcinomas is strongly correlated with estrogen receptor positivity.

## REFERENCES

- Schlessinger, J. and Ullrich, A. 1992. Growth factor signalling by receptor tyrosine kinases. *Neuron* 9: 383-391.
- Margolis, B. 1992. Proteins with SH2 domains: transducers in the tyrosine kinase signalling pathway. *Cell Growth Differ.* 3: 73-80.
- Fanti, W.J., Johnson, D.E. and Williams, L.T. 1993. Signalling by receptor tyrosine kinases. *Annu. Rev. Biochem.* 62: 453-481.
- Stein, D., Wu, J., Fuqua, S.A.W., Roonprapunt, C., Yajnik, V., D'Eustachio, P., Moskow, J.J., Buchberg, A.M., Osbourne, C.K. and Margolis, B. 1994. The SH2 domain protein GRB7 is co-amplified, overexpressed and in a tight complex with HER2 in breast cancer. *EMBO J.* 13: 1331-1340.
- Ooi, J., Yajnik, V., Immanuel, D., Gordon, M., Moskow, J.J., Buchberg, A.M. and Margolis, B. 1995. The cloning of GRB10 reveals a new family of SH2 domain proteins. *Oncogene* 10: 1621-1630.
- Wandless, T.J. 1996. SH2 domains: a question of independence. *Curr. Biol.* 6: 125-127.
- Feng, G.S., Ouyang, Y.B., Hu, D.P., Shi, Z.Q., Gentz, R. and Ni, J. 1996. Grap is a novel SH3-SH2-SH3 adaptor protein that couples tyrosine kinases to the Ras pathway. *J. Biol. Chem.* 271: 12129-12132.

## CHROMOSOMAL LOCATION

Genetic locus: GRB14 (human) mapping to 2q24.3.

## PRODUCT

GRB14 (h): 293T Lysate represents a lysate of human GRB14 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

GRB14 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive GRB14 antibodies. Recommended use: 10-20 µl per lane.

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

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.