
anti-Brk

Cat #: HM1042
Rabbit polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

Members of the Src family of protein tyrosine kinases play crucial roles in cell proliferation and differentiation. A novel Src-related protein designated Sik (Src-related intestinal kinase) was identified that is specifically expressed in epithelial tissues and is restricted to cell layers immediately above the proliferative cell zone in skin and alimentary canal lining. The human homolog of Sik was isolated from a human metastatic breast tumor and designated Brk. Brk is 80% identity to Sik and exhibits the features of a nonreceptor tyrosine kinase, including amino terminal SH3 and SH2 domains. Overexpression of Brk in mammary epithelial cells leads to sensitization of the cells to epidermal growth factor and results in a partially transformed phenotype. Brk has been shown to undergo autophosphorylation.

SPECIFICITY

This antibody reacts with human Brk by Western blotting and immunohistochemistry (including paraffin-embedded sections); non cross-reactive with mouse homolog Sik.

Molecular Weight of Brk: 48 kDa.

IMMUNOGEN

A peptide at the carboxy terminus of human Brk.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

1. Wilks, A.F. 1989. Two putative protein-tyrosine kinases identified by application of the polymerase chain reaction. *Proc. Natl. Acad. Sci. USA* 86: 1603-1607.
2. Vasioukhin V., Serfas, M.S., Siyanova, E.Y., Polonskaia, M., Costigan, V.J., Liu, B., Thomason, A. and Tyner, A.L. 1995. A novel intracellular epithelial cell tyrosine kinase is expressed in the skin and gastrointestinal tract. *Oncogene* 10: 349-357.
3. Mitchell, P.J., Barker, K.T., Martindale, J.E., Kamala-ti, T., Lowe, P.N., Page, M.J., Gusterson, B.A., and Crompton, M.R. 1994. Cloning and characterization of cDNAs encoding a novel non-receptor tyrosine kinase, brk, expressed in human breast tumours. *Oncogene* 9: 2383-2390.
4. Qiu, H. and Miller, W.T. (2002) Regulation of the nonreceptor tyrosine kinase Brk by autophosphorylation and by autoinhibition. *J. Biol. Chem.* 277, 34634-34641.

5. Derry, J.J., Prins, G.S., Ray, V. and Tyner, A.L. (2003) Altered localization and activity of the intracellular tyrosine kinase BRK/Sik in prostate tumor cells. *Oncogene* 22, 4212-4220.
6. Qiu, H. and Miller, W.T. (2004) Role of the Brk SH3 domain in substrate recognition. *Oncogene* 23, 2216-2223.
7. Chen, H.Y., Shen, C.H., Tsai, Y.T., Lin, F.C., Huang, Y.P. and Chen, R.H. (2004) Brk activates rac1 and promotes cell migration and invasion by phosphorylating paxillin. *Mol. Cell. Biol.* 24, 10558-10572.

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