Fhit (h): 293T Lysate: sc-114836



The Power to Question

BACKGROUND

Fhit, a candidate tumor suppressor gene, contains the FRA3B common fragile site and is highly susceptible to carcinogen damage. The pattern of mutational inactivation seen with the Fhit gene is unique compared with other known tumor suppressors. Fhit gene structure and expression have been shown to be altered in esophageal, head, neck, lung, gastric, breast and cervical carcinomas. It has been demonstrated that Fhit exon loss is associated with smoking duration or asbestos exposure. The Fhit protein is a member of the histidine triad (HIT) superfamily and functions as a dinucleoside 5',5"'-P1,P3-triphosphate hydrolase.

REFERENCES

- Mao, L., Fan, Y.H., Lotan, R. and Hong, W.K. 1996. Frequent abnormalities of Fhit, a candidate suppressor gene, in head and neck cancer cell lines. Cancer Res. 56: 5128-5131.
- Barnes, L.D., Garrison, P.N., Siprashvili, Z., Guranowski, A., Robinson, A.K., Ingram, S.W., Croce, C.M., Ohta, M. and Huebner, K. 1996. Fhit, a putative tumor suppressor in humans, is a dinucleoside 5',5"'-P1,P3-triphosphate hydrolase. Biochemistry 35: 11529-11535.
- Siprashvili, Z., Sozzi, G., Barnes, L.D., McCue, P., Robinson, A.K., Eryomin, V., Sard, L., Tagliabue, E., Greco, A., Fusetti, L., Schwartz, G., Pierotti, M.A., Croce, C.M. and Huebner, K. 1997. Replacement of Fhit in cancer cells suppresses tumorigenicity. Proc. Natl. Acad. Sci. USA 94: 13771-13776.
- Bugert, P., Wilhelm, M. and Kovacs, G. 1997. Fhit gene and the FRA3B region are not involved in the genetics of renal cell carcinomas. Genes Chromosomes Cancer 20: 9-15.
- Michael, D., Beer, D.G., Wilke, C.W., Miller, D.E. and Glover, T.W. 1997. Frequent deletions of Fhit and FRA3B in Barrett's metaplasia and esophageal adenocarcinomas. Oncogene 15: 1653-1659.
- Le Beau, M.M., Drabkin, H., Glover, T.W., Gemmill, R., Rassool, F.V., McKeithan, T.W. and Smith, D.I. 1998. An Fhit tumor suppressing gene? Genes Chromosomes Cancer 21: 281-289.
- Nelson, H.H., Wiencke, J.K., Gunn, L., Wain, J.C, Christiani, D.C. and Kelsey, K.T. 1998. Chromosome 3p14 alterations in lung cancer: evidence that Fhit exon deletion is a target of tobacco carcinogen and asbestos. Cancer Res. 58: 1804-1807.

CHROMOSOMAL LOCATION

Genetic locus: FHIT (human) mapping to 3p14.2.

PRODUCT

Fhit (h): 293T Lysate represents a lysate of human Fhit 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

Fhit (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Fhit 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com