



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# AFP (h2): 293T Lysate: sc-170237

## BACKGROUND

$\alpha$ -fetoprotein (AFP) is expressed in fetal liver at varying levels throughout development and is present only in trace amounts in normal adult tissues. AFP can be detected at abnormally high concentrations in hepatocellular carcinomas as well as in the plasma and ascitic fluid of adults with hepatoma. High AFP concentrations have been correlated with tumor cell growth, indicating that AFP can serve as a tumor marker. AFP binds copper, nickel and fatty acids, and in some cases may bind serum albumin or estrogen. It has been demonstrated that the AFP promoter is a target for NF-1 (nuclear factor-1), HNF-1 (hepatocyte nuclear factor-1) and C/EBP transcription factors. While HNF-1 binding to the AFP promoter results in AFP expression, NF-1 binding results in a decrease in AFP promoter activity.

## REFERENCES

1. Aoyagi, Y., Ikenaka, T. and Ichida, F. 1978. Copper (II)-binding ability of human  $\alpha$ -fetoprotein. *Cancer Res.* 38: 3483-3486.
2. Stefanova, I., Horejsí, V., Kristofová, H., Angelisová, P., Zizkovský, V. and Hilgert, I. 1988. Monoclonal antibodies against human  $\alpha$ -fetoprotein. Exploitation of an unusual calcium-dependent interaction with the antigen for analytical and preparative purposes. *J. Immunol. Methods* 111: 67-73.
3. Iturralde, M., Alava, M.A., Gonzalez, B., Anel, A. and Pineiro, A. 1991. Effect of  $\alpha$ -fetoprotein and albumin on the uptake of polyunsaturated fatty acids by rat hepatoma cells and fetal rat hepatocytes. *Biochim. Biophys. Acta* 1086: 81-88.
4. Bois-Joyeux, B. and Danan, J.L. 1994. Members of the CAAT/enhancer-binding protein, hepatocyte nuclear factor-1 and nuclear factor-1 families can differentially modulate the activities of the rat  $\alpha$ -fetoprotein promoter and enhancer. *Biochem. J.* 301: 49-55.
5. Ido, A., Nakata, K., Kato, Y., Murata, K., Fujita, M., Ishii, N., Tamaoki, T., Shiku, H. and Nagataki, S. 1995. Gene therapy for hepatoma cells using a retrovirus vector carrying herpes simplex virus thymidine kinase gene under the control of human  $\alpha$ -fetoprotein gene promoter. *Cancer Res.* 55: 3105-3109.
6. Bois-Joyeux, B., Homassin, H., Richard, F., Ikonomova, R., Denissenko, M. and Dana, J.L. 1995. Several transcription factors participate in the functioning of the  $\alpha$ -fetoprotein gene promoter. *Bull. Cancer* 82: 541-550.
7. Wang, X.W. and Xu, B. 1998. Stimulation of tumor-cell growth by  $\alpha$ -fetoprotein. *Int. J. Cancer* 75: 596-599.
8. Baker, M.E., Medlock, K.L. and Sheehan, D.M. 1998. Flavonoids inhibit estrogen binding to rat  $\alpha$ -fetoprotein. *Proc. Soc. Exp. Biol. Med.* 217: 317-321.

## 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.

## PROTOCOLS

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

## CHROMOSOMAL LOCATION

Genetic locus: AFP (human) mapping to 4q13.3.

## PRODUCT

AFP (h2): 293T Lysate represents a lysate of human AFP transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

AFP (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive AFP antibodies. Recommended use: 10-20  $\mu$ 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.