SANTA CRUZ BIOTECHNOLOGY, INC.

Afamin (G-10): sc-373849

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Afamin (AFM), also known as α-albumin, is a 599 amino acid protein belonging to the ALB/AFP/VDB family. Members of the ALB/AFP/VDB family are encoded by four genes that localize to chromosome 4 in a tandem arrangement. The four genes encode proteins, including ALB, AFB, Afamin and DBP, that are structurally related serum transport proteins. Afamin is believed to play a role in the transport of a yet unknown ligand. Afamin is expressed in the liver and is secreted into the bloodstream. Afamin contains three ALB domains and is N-glycosylated.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 104145. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
2. Voegele, A.F., et al. 2002. Characterization of the vitamin E-binding properties of human plasma Afamin. Biochemistry 41: 14532-14538.
3. Khan, M.A., et al. 2002. Bilirubin binding properties of pigeon serum albumin and its comparison with human serum albumin. Int. J. Biol. Macromol. 30: 171-178.
4. Jerkovic, L., et al. 2005. Afamin is a novel human vitamin E-binding glycoprotein characterization and *in vitro* expression. J. Proteome Res. 4: 889-899.
5. Liu, T., et al. 2005. Human plasma N-glycoproteome analysis by immunoaffinity subtraction, hydrazide chemistry, and mass spectrometry. J. Proteome Res. 4: 2070-2080.
6. Terentiev, A.A. and Moldogazieva, N.T. 2006. Structural and functional mapping of α-fetoprotein. Biochemistry 71: 120-132.

CHROMOSOMAL LOCATION

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

SOURCE

Afamin (G-10) is a mouse monoclonal antibody raised against amino acids 454-507 mapping within an internal region of Afamin of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Afamin (G-10) is available conjugated to agarose (sc-373849 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-373849 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373849 PE), fluorescein (sc-373849 FITC), Alexa Fluor® 488 (sc-373849 AF488), Alexa Fluor® 546 (sc-373849 AF546), Alexa Fluor® 594 (sc-373849 AF594) or Alexa Fluor® 647 (sc-373849 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373849 AF680) or Alexa Fluor® 790 (sc-373849 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

Afamin (G-10) is recommended for detection of Afamin of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Afamin siRNA (h): sc-72462, Afamin shRNA Plasmid (h): sc-72462-SH and Afamin shRNA (h) Lentiviral Particles: sc-72462-V.

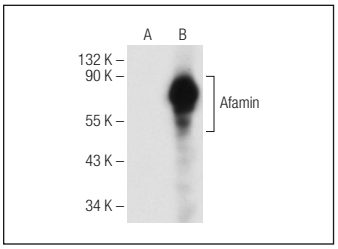
Molecular Weight of Afamin: 69 kDa.

Positive Controls: human Afamin trasfected 293T whole cell lysate or human testis extract: sc-363781.

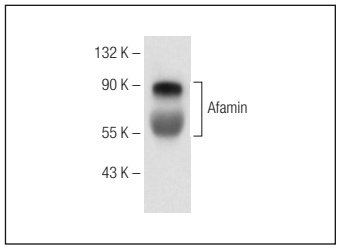
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Afamin (G-10): sc-373849. Western blot analysis of Afamin expression in non-transfected (**A**) and human Afamin transfected (**B**) 293T whole cell lysates.



Afamin (G-10): sc-373849. Western blot analysis of Afamin expression in human testis tissue extract.

SELECT PRODUCT CITATIONS

1. Pang, L., et al. 2018. Urine proteomics of primary membranous nephropathy using nanoscale liquid chromatography tandem mass spectrometry analysis. Clin. Proteomics 15: 5.
2. Cheng, Q., et al. 2022. Serum proteome profiling reveals differentially expressed proteins between subjects with metabolically healthy obesity and nonalcoholic fatty liver disease. J. Proteomics 260: 104556.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.