SANTA CRUZ BIOTECHNOLOGY, INC.

Afamin (H-54): sc-135280



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

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- Voegele, A.F., et al. 2002. Characterization of the vitamin E-binding properties of human plasma afamin. Biochemistry 41: 14532-14538.
- 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.
- 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.
- Liu, T., et al. 2005. Human plasma N-glycoproteome analysis by immunoaffinity subtraction, hydrazide chemistry, and mass spectrometry. J. Proteome Res. 4: 2070-2080.
- Terentiev, A.A. and Moldogazieva, N.T. 2006. Structural and functional mapping of α-fetoprotein. Biochemistry Mosc. 71: 120-132.

CHROMOSOMAL LOCATION

Genetic locus: AFM (human) mapping to 4q13.3; Afm (mouse) mapping to 5 E1.

SOURCE

Afamin (H-54) is a rabbit polyclonal antibody raised against amino acids 454-507 mapping within an internal region of Afamin of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

Afamin (H-54) is recommended for detection of Afamin of human, mouse and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Afamin (H-54) is also recommended for detection of Afamin in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Afamin siRNA (h): sc-72462, Afamin siRNA (m): sc-72463, Afamin shRNA Plasmid (h): sc-72462-SH, Afamin shRNA Plasmid (m): sc-72463-SH, Afamin shRNA (h) Lentiviral Particles: sc-72462-V and Afamin shRNA (m) Lentiviral Particles: sc-72463-V.

Molecular Weight of Afamin: 69 kDa.

Positive Controls: mouse testis extract: sc-2405.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.





Afamin (H-54): sc-135280. Western blot analysis of Afamin expression in mouse testis tissue extract.

RESEARCH USE

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