SANTA CRUZ BIOTECHNOLOGY, INC.

AGP-1 (29A1): sc-69753

BACKGROUND

AGP (α1-acid glycoprotein) is an acute phase plasma protein synthesized by the liver. It functions to regulate the interaction between blood cells and endothelial cells, and together with haptoglobin and C reactive protein, it also mediates the extravasation of cells during infection and inflammation. Expression of AGP is induced by acute-phase stimulatory agents such as bacterial lipopolysaccharides. AGP has a high affinity, low capacity binding for basic drugs at physiological pH. In human plasma, AGP is found at levels of 0.5-1.4 mg/ml, though this is elevated during acute inflammation, and, as a result, levels of this protein can be used to diagnose inflammatory conditions. AGP-1 and AGP-2 contain five and six potential N-glycosylation sites, respectively. Abnormal expression of the APG-1 gene is linked to sarcoidosis and other immunogenetic diseases, while mutations in the APG-2 gene are associated with different types of carcinomas.

REFERENCES

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2. Lee, S.C., et al. 1989. Molecular cloning of cDNAs corresponding to two genes of α1-acid glycoprotein and characterization of two alleles of AGP-1 in the mouse. DNA 8: 245-251.
3. Carter, K.C., et al. 1991. Differential expression of the mouse α1-acid glycoprotein genes (AGP-1 and AGP-2) during inflammation and aging. Biochim. Biophys. Acta 1089: 197-205.
4. Chang, C.J., et al. 1992. Structure and expression of mouse α1-acid glycoprotein gene 3 (AGP-3). DNA Cell Biol. 11: 315-320.
5. Fan, C., et al. 1995. Synergistic interaction between ORM1 and C3 types in disease associations. Exp. Clin. Immunogenet. 12: 92-95.
6. Lin, D.B., et al. 2003. Seroprevalence of hepatitis C virus infection and its association with natural infection of hepatitis B virus among preschool children in Taiwan. Eur. J. Epidemiol. 18: 245-249.
7. Ceciliani, F., et al. 2005. Identification of the bovine α1-acid glycoprotein in colostrum and milk. Vet. Res. 36: 735-746.
8. Mikhailov, A.S. 2005. Study of the pH-dependent conformational changes in α1-acid glycoprotein using FRET. Ann. N.Y. Acad. Sci.1048: 453-456.
9. Hazai, E., et al. 2006. Selective binding of coumarin enantiomers to human α1-acid glycoprotein genetic variants. Bioorg. Med. Chem.14: 1959-1965.

CHROMOSOMAL LOCATION

Genetic locus: ORM1 (human) mapping to 9q32.

SOURCE

AGP-1 (29A1) is a mouse monoclonal antibody raised against purified AGP-1 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains IgG_1 in 100 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

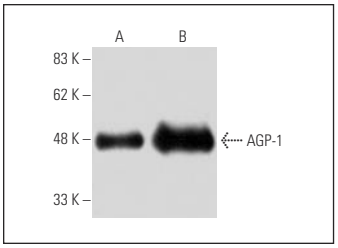
APPLICATIONS

AGP-1 (29A1) is recommended for detection of AGP-1 of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000) and immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for AGP-1/2 siRNA (h): sc-60133, AGP-1/2 shRNA Plasmid (h): sc-60133-SH and AGP-1/2 shRNA (h) Lentiviral Particles: sc-60133-V.

Molecular Weight of glycosylated AGP-1: 41-47 kDa.

DATA



AGP-1 (29A1): sc-69753. Western blot analysis of AGP-1 purified from human plasma (**A**) and in human plasma (**B**).

SELECT PRODUCT CITATIONS

1. Chang, Y.S., et al. 2017. Low levels of IgG recognizing the α-1-antitrypsin peptide and its association with Taiwanese women with primary Sjögren's syndrome. Int. J. Mol. Sci. 18: 2750.

STORAGE

Store at 4° C, **DO 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 for detailed protocols and support products.