AGP-1/2 (K-15): sc-51020

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BIOTECHNOLOGY

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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. Multiple AGP genes exist, including AGP-1, AGP-2, AGP-3 and AGP-8. 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.

CHROMOSOMAL LOCATION

Genetic locus: ORM1/ORM2 (human) mapping to 9q32.

SOURCE

AGP-1/2 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AGP-1 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.

Blocking peptide available for competition studies, sc-51020 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

RESEARCH USE

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

APPLICATIONS

AGP-1/2 (K-15) is recommended for detection of AGP-1 and AGP-2 of human origin by Western Blotting (starting dilution 1:200, 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 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-1/2: 41-47 kDa.

Positive Controls: human plasma extract: sc-364374.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA
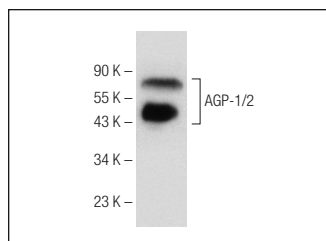
AGP-1/2 (K-15): sc-51020. Western blot analysis of AGP-1/2 in human plasma.

SELECT PRODUCT CITATIONS

1. Fu-Jun, L., et al. 2012. Differential proteomic analysis of pathway biomarkers in human breast cancer by integrated bioinformatics. Oncol. Lett. 4: 1097-1103.

2. Zhang, H., et al. 2012. Preliminary proteomic analysis of human serum from patients with laryngeal carcinoma. Eur. Arch. Otorhinolaryngol. 269: 557-563.

PROTOCOLS

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

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Try **AGP-1/2 (F-4): sc-515724** or **AGP-1 (27A1): sc-69753**, our highly recommended monoclonal alternatives to AGP-1/2 (K-15).