

# AGP-1/2 (F-4): sc-515724

## BACKGROUND

AGP ( $\alpha$ 1-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

- Umetsu, K., et al. 1986. Orosomucoid (ORM) typing by print lectinofixation: a new technique for isoelectric focusing. Two common alleles in Japan. *Hum. Genet.* 71: 223-224.
- Lee, S.C., et al. 1989. Molecular cloning of cDNAs corresponding to two genes of  $\alpha$ 1-acid glycoprotein and characterization of two alleles of AGP-1 in the mouse. *DNA* 8: 245-251.
- Carter, K.C., et al. 1991. Differential expression of the mouse  $\alpha$ 1-acid glycoprotein genes (AGP-1 and AGP-2) during inflammation and aging. *Biochim. Biophys. Acta* 1089: 197-205.
- Chang, C.J., et al. 1992. Structure and expression of mouse  $\alpha$ 1-acid glycoprotein gene-3 (AGP-3). *DNA Cell Biol.* 11: 315-320.
- Fan, C., et al. 1995. Synergistic interaction between ORM1 and C3 types in disease associations. *Exp. Clin. Immunogenet.* 12: 92-95.

## CHROMOSOMAL LOCATION

Genetic locus: ORM1/ORM2 (human) mapping to 9q32; Orm1 (mouse) mapping to 4 B3, Orm2 (mouse) mapping to 4 C1.

## SOURCE

AGP-1/2 (F-4) is a mouse monoclonal antibody raised against amino acids 1-201 representing full length AGP-2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AGP-1/2 (F-4) is available conjugated to agarose (sc-515724 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515724 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515724 PE), fluorescein (sc-515724 FITC), Alexa Fluor<sup>®</sup> 488 (sc-515724 AF488), Alexa Fluor<sup>®</sup> 546 (sc-515724 AF546), Alexa Fluor<sup>®</sup> 594 (sc-515724 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-515724 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-515724 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-515724 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

AGP-1/2 (F-4) is recommended for detection of AGP-1 and AGP-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Suitable for use as control antibody for AGP-1/2 siRNA (h): sc-60133, AGP-1/2 siRNA (m): sc-60134, AGP-1/2 shRNA Plasmid (h): sc-60133-SH, AGP-1/2 shRNA Plasmid (m): sc-60134-SH, AGP-1/2 shRNA (h) Lentiviral Particles: sc-60133-V and AGP-1/2 shRNA (m) Lentiviral Particles: sc-60134-V.

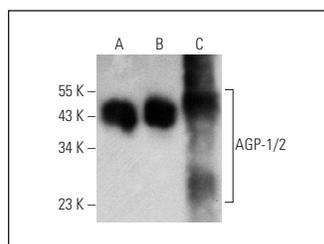
Molecular Weight of glycosylated AGP-1/2: 41-47 kDa.

Positive Controls: human small intestine extract: sc-364225, human bone marrow extract: sc-363752 or human kidney tissue extract: sc-363764.

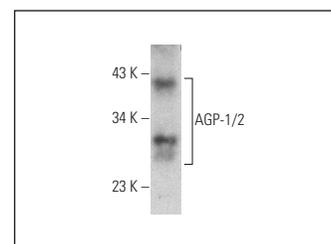
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



AGP-1/2 (F-4): sc-515724. Western blot analysis of AGP-1/2 expression in human kidney (A), human small intestine (B) and human bone marrow (C) tissue extracts.



AGP-1/2 (F-4): sc-515724. Western blot analysis of AGP-1/2 expression in mouse kidney tissue extract.

## 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.

Alexa Fluor<sup>®</sup> is a trademark of Molecular Probes, Inc., Oregon, USA