

# A1BG (F-9): sc-374415

## BACKGROUND

A1BG ( $\alpha_1$ B-glycoprotein), also known as A1B, ABG, GAB or HYST2477, is a 495 amino acid secreted glycoprotein that contains five immunoglobulin (Ig)-like V-type domains and belongs to the immunoglobulin superfamily. At an average concentration of 22mg/dl, A1BG is expressed in normal adult plasma and is thought to be involved in the regulation of cell behavior and cell recognition. In plasma, A1BG specifically binds to human CRISP-3, a member of the cysteine-rich secretory protein (CRISP) family comprised of evolutionarily conserved proteins which are believed to play a role in the innate immune system. Through its association with CRISP-3, A1BG is believed to function in protecting the body from the circulation of free CRISP-3, a circumstance with potentially harmful effects.

## REFERENCES

1. Ishioka, N., et al. 1986. Amino acid sequence of human plasma  $\alpha_1$ B-glycoprotein: homology to the immunoglobulin supergene family. *Proc. Natl. Acad. Sci. USA* 83: 2363-2367.
2. Gahne, B., et al. 1987. Genetic polymorphism of human plasma  $\alpha_1$ B-glycoprotein: phenotyping by immunoblotting or by a simple method of 2-D electrophoresis. *Hum. Genet.* 76: 111-115.
3. Juneja, R.K., et al. 1988. Further studies of the plasma  $\alpha_1$ B-glycoprotein polymorphism: two new alleles and allele frequencies in Caucasians and in American blacks. *Hum. Hered.* 38: 267-272.
4. Eiberg, H., et al. 1989. Linkage between  $\alpha_1$ B-glycoprotein (A1BG) and Lutheran (LU) red blood group system: assignment to chromosome 19: new genetic variants of A1BG. *Clin. Genet.* 36: 415-418.
5. Juneja, R.K., et al. 1994. Distribution of plasma  $\alpha_1$ B-glycoprotein (A1BG) polymorphism in several populations of the Indian subcontinent. *Ann. Hum. Biol.* 21: 443-448.

## CHROMOSOMAL LOCATION

Genetic locus: A1BG (human) mapping to 19q13.43.

## SOURCE

A1BG (F-9) is a mouse monoclonal antibody raised against a peptide mapping within an internal region of A1BG of human origin.

## PRODUCT

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

A1BG (F-9) is available conjugated to agarose (sc-374415 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374415 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374415 PE), fluorescein (sc-374415 FITC), Alexa Fluor<sup>®</sup> 488 (sc-374415 AF488), Alexa Fluor<sup>®</sup> 546 (sc-374415 AF546), Alexa Fluor<sup>®</sup> 594 (sc-374415 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-374415 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-374415 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-374415 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

A1BG (F-9) is recommended for detection of A1BG of 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 A1BG siRNA (h): sc-97518, A1BG shRNA Plasmid (h): sc-97518-SH and A1BG shRNA (h) Lentiviral Particles: sc-97518-V.

Molecular Weight of A1BG: 54 kDa.

Molecular Weight of deglycosylated A1BG: 68 kDa.

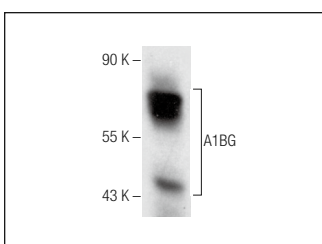
Molecular Weight of glycosylated A1BG: 74-80 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, human breast extract: sc-363753 or human liver extract: sc-363766.

## 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



A1BG (F-9): sc-374415. Western blot analysis of A1BG expression in Hep G2 whole cell lysate.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.