



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sia.com
sigma-aldrich.com

Product Information

MONOCLONAL ANTI- α_1 -ACID GLYCOPROTEIN

Clone AGP-47

Mouse Ascites Fluid

Product Number **A 5566**

Product Description

Monoclonal Anti- α_1 -Acid Glycoprotein (mouse IgG1 isotype) is derived from the AGP-47 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice. Purified human α_1 -acid glycoprotein was used as the immunogen. The isotype is determined using the Sigma ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2).

α_1 -Acid Glycoprotein (AGP, orosomucoid)^{1,2} is an acute-phase plasma protein that, together with haptoglobin and C-reactive protein, indicates inflammation. In human plasma, AGP (44 kDa) is found at levels of 0.5-1.4 mg/ml and pronounced changes of these levels have been observed in various pathological conditions.

Increased concentrations of AGP are known to be associated with various inflammatory diseases, trauma, malignancies, myocardial infarction, rheumatoid arthritis, after major surgery, and in cases of chronic pain. Basic drugs may be extensively bound to AGP and increases in this protein significantly affect their pharmacokinetic parameters owing to a decrease in the concentration of unbound drug in serum.² Many immunological methods which make use of polyclonal or monoclonal antibodies have been described for determination and identification of AGP in plasma.

Reagents

The product is provided as ascites fluid with 0.1% sodium azide as a preservative.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing is **not** recommended. Storage in "frost-free" freezers is **not** recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Monoclonal Anti-Human α_1 -Acid Glycoprotein (AGP) recognizes an epitope located on the 44 kD subunit of denatured and reduced AGP in immunoblotting. It does not cross-react with human serum amyloid P component, human haptoglobin, human C-reactive protein, or human IgG. Weak cross-reactivity is observed with baboon AGP, but not with AGP from bovine and dog. The product reacts with AGP (native or denatured and reduced) in ELISA, dot blot and immunoblotting.

The working dilution is 1:10,000 by indirect immunoblotting using human plasma.

In order to obtain best results in different techniques or preparations, it is recommended that each individual user determine their optimal working dilutions by titration assay.

References

1. Schmid, K., in: *The plasma Proteins: Structure, Function and Genetic Control*, Putnam, F., (ed.), 176, Academic Press, New York (1975).
2. Routledge, P., in: *α_1 -Acid-Glycoprotein: Genetics, Biochemistry, Physiological Functions, and Pharmacology*, Bauman, P., et al., (eds.), 185, Alan Liss Inc., New York (1989).

JWM/KMR 04/02

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.