

**MONOCLONAL Anti- α_1 -Acid GLYCOPROTEIN
CLONE AGP-47
Mouse Ascites Fluid**

Product No. **A5566**
Lot 043H4848

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 (Sigma Stock No. ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Sigma Stock No. ISO-2). The product is provided as ascites fluid with 0.1% sodium azide (see MSDS)* as a preservative.

Specificity

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.

Working Dilution 1:10,000

The working dilution was determined 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.

Description

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 kD) 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.

Uses

Monoclonal Anti-Human α_1 -Acid Glycoprotein may be used for the localization of α_1 -acid glycoprotein using ELISA, dot blot and immunoblot.

Storage

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.

* 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 hazardous and safe handling practices.

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).

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