

**Product Specification Sheet**

**Rat Alpha 1 acid glycoprotein (A1AG) Protein Antibodies and Controls**

<b>Cat. #</b> A1AG19-A	Rabbit Anti-ARat Alpha 1 acid glycoprotein (A1AG) Protein IgG	<b>SIZE:</b> 100 ul
<b>Cat. #</b> A1AG19-C	Rat Alpha 1 acid glycoprotein (A1AG) Protein Western Blot +ve control	<b>SIZE:</b> 100 ul

A1AG serum protein, also called orosomucoid, is a monomer about 210 amino acid residues long; the amino acid sequence has been determined through 192 amino acids. A1AG is found in human plasma in concentrations of 55-140 mg per 100 ml. It is a classical standard glycoprotein (40 Kda, ~40% carbohydrates) for studies on the structure of the oligosaccharide units. Its biological significance is unknown, although it can bind progesterone 15 times as strongly as albumin. Sialic-acid-deficient alpha-1-AG has an affinity for vitamin B-12. Clinically, alpha 1 acid glycoprotein is an acute-phase reactant that together with haptoglobin is an indicator of acute inflammation. The alpha 1 acid glycoprotein:haptoglobin ratio is useful in studies of bone marrow disorders, hemolytic processes and metastases.

It is a positive acute phase reactant, the levels of which increase significantly in cats in response to inflammation, tissue injury and disease. A1AGP is purified using proprietary methods.

OROSOMUCOID 1; ORM1

Alternative titles; symbols : ORM, GLYCOPROTEIN, ALPHA-1-ACID, OF SERUM, ALPHA-1-ACID GLYCOPROTEIN ALPHA-1-AGP; AGP1, Gene map locus 9q34.1-q34.3

**Source of Antigen, Antibodies, and positive controls**

<b>Antigen</b>	Purified Rat AGP1 (A1AG) protein
<b>Ab Host/type</b>	Rabbit, Polyclonal purified IgG (#A1AG19-A) supplied in PBS/azide/0.1% BSA
<b>2-Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>-ve control IgG</b>	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Rat **A1AG protein** for Western blot +ve control (**Cat # A1AG19-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **A1AG19-C** for good visibility with antibody Cat # **A1AG19-A**. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **A1AG19-C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Do not freeze, thaw, or heat repeatedly

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for lyophilized items.

**Form & Storage of Antibodies/Peptide Control**

**Purified IgG**

100 ul/vial solution lyophilized powder contains 0.05% sodium azide **Reconstitute powder** 100 ul PBS

**Storage**

**Short-term:** unopened, undiluted liquid vials for less than a week at 4oC.

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder.

**Recommended Usage**

**Western Blotting** 1:1K for neat serum using Chemiluminescence technique). Human A1AG is approx. ~40 kDa.

**ELISA** (1:10K-1:100K; using 50-100 ng of control protein/well).

**Histochemistry & Immunofluorescence: not tested.** We recommend a dilution of 1:200 to 1:500.

**Specificity & Cross-reactivity**

Antibody # A1AG19-A reacts with Rat A1AG/AGP as tested by western and ELISA. Antibody crossreactivity in various species is not established. **cat # A1AG19-C Rat protein control** should be used a positive control.

**General References:** Dente L (1985) Nucl. Acid. Res. 13, 3941; Dente L (1987) EMBO J. 6, 2289; Board PG (1986) Gene 44, 127-131; Tokita K (1963) Nature, 200,266

\*This product is for in vitro research use only.

**Relates Items**

Human, mouse, rat, cat, and Dog A1AG/AGP proteins and antibodies

**610-410-MLC Rat a-1-Acid Glycoprotein ELISA kit**

A1AG19A-C

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