

IVD DATA SHEET

Serum Amyloid A

Concentrated Rabbit Monoclonal Antibody

Intended Use:

For in Vitro Diagnostic Use

Epitomics' Rabbit Monoclonal Anti-Human Serum Amyloid A, Clone EP335, is intended for use to qualitatively identify Serum Amyloid A by light microscopy in sections of formalin-fixed, paraffin-embedded tissue using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient's clinical history and other diagnostic tests. Evaluation must be performed by a qualified pathologist.

Catalog number	Description	Dilution
AC-0311A	0.1 ml, concentrated	1:100-1:200
AC-0311B	0.5 ml, concentrated	1:100-1:200
AC-0311	1 ml, concentrated	1:100-1:200
AC-0311BULK	2 ml or more, concentrated	1:100-1:200

Immunogen: A synthetic peptide corresponding to residues of human Serum Amyloid A protein

Source: Rabbit Monoclonal Antibody

Clone ID: EP335

Isotype: Rabbit IgG

Application: Immunohistochemistry for formalin-fixed paraffin-embedded tissue

Summary and Explanation:

Serum Amyloid A (SAA) is an acute-phase protein primarily synthesized in the liver. While it is typically found at low concentrations in healthy individuals, pro-inflammatory cytokines upregulate SAA production to encourage recruitment of immune cells to inflammatory sites.

Amyloidosis is a disease characterized by the abnormal build-up of amyloid, abnormal non-branching fibrillary β -pleated sheet proteins that are insoluble and highly resistant to proteolytic degradation that result into localized or systemic organ dysfunction. Amyloidosis are grouped as AL (primary), AA (secondary), and hereditary forms. Proper classification is important since treatment and prognoses of the disorders are vastly different. AA (secondary) amyloidosis is associated with a variety of chronic inflammatory conditions and infections, derived from SAA. Immunohistochemical staining using a panel of antibodies including κ and λ Ig light chains, amyloid A, and transthyretin can aid in recognizing most forms of amyloid.

Recently, SAA has also been investigated as a potential marker for neoplastic activity. SAA concentrations have been reported to be a marker of poor prognosis, elevated in patients with advanced stages of cancer and those with malignant disease.

Reagent Provided:

Antibody to Serum Amyloid A is affinity purified and diluted in 10 mM phosphate buffered saline (PBS), pH 7.2 containing 1% bovine serum albumin (BSA) and 0.09% sodium azide (NaN₃).

Storage and Stability:

Store at 2-8 °C. Don't use after expiration date provided on the vial. End user must validate any storage conditions other than those specified.

Procedures Recommended:

1. Pretreatment: Epitope retrieval using Tris/EDTA buffer (catalog #: SP-0004) with a pressure cooker.

2. Endogenous peroxidase block: Block for 10 minutes at room temperature using peroxidase solution (catalog #: SP-0002).

3. Protein block: Block for 10 minutes at room temperature using blocking solution (catalog #: SP-0003).

4. Primary antibody: Incubate for 30 minutes.

5. Detection: Follow instructions from the selected detection system (EpiPrecision™, a Biotin Streptavidin-HRP Detection, catalog #: DK-0001, 0003, or EpiVision™, a Rabbit Polymer Detection, catalog # DK-0002, 0004).

The antibody dilution and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory.

Performance Characteristics:

This antibody gives extracellular and cytoplasmic staining in positive cells. The recommended positive controls are kidney for normal tissue and amyloidosis for abnormal tissue.

Limitations:

Immunohistochemistry is a complex process. Variation in tissue selection, tissue processing, antigen retrieval, peroxidase activity, detection systems and improper counterstaining may cause variation in results.

References:

1. Chan DC, et al.: *Ann Surg Oncol*. 2007, 14(1):84-93.
2. Cho WC, et al.: *Clin Cancer Res*. 2004, 10(1 Pt 1):43-52.
3. Cho WC, et al.: *Br J Cancer*. 2010, 102(12):1731-5.
4. Cocco E, et al.: *Br J Cancer*. 2009, 101(2):335-41.
5. Gertz MA: *Am J Clin Pathol*. 2004, 121(6):787-9.
6. Husby G, et al.: *Cancer Res*. 1982, 42(4):1600-3.
7. Kaplan B, et al.: *Am J Clin Pathol*. 2004, 121(6):794-800.
8. Le L, et al.: *Clin Chem*. 2005, 51(4):695-707.
9. Moshkovskii SA, et al.: *Proteomics*. 2005, 5(14):3790-7.

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