IgAGM-FITC

Product identification

IgAGM-FITC
Cat. No.: 2090620810, 1 ml Concentrate
Cat. No.: 2090620820, 2 ml Concentrate
Cat. No.: 2090620830, 3 ml Ready-to-use
Cat. No.: 2090620870, 7 ml Ready-to-use
Further packing sizes possible.

Intended use

For *in vitro* diagnostic use.
IgAGM-FITC is a polyclonal anti-human rabbit antibody coupled with the fluorescent dye fluorescein isothiocyanate (FITC). It is intended for immunohistochemical applications and other immunofluorescence techniques.
The detection with the antibody must be performed by qualified personnel only. The results must be evaluated by qualified pathologists, taking into account the patient's medical history and other diagnostic tests.

Summary and explanation

Antibodies (immunoglobulins,outdated gamma globulin) are proteins (Albumins) from the class of globulins, which are formed (synthesized) in vertebrates as a reaction product of special body cells (plasma cells) to certain substances (called antigens). Antibodies are in the service of the immune system. Antibodies are produced by a class of white blood cells, the plasma cells, in response to a reaction of the B lymphocytes.

Immunoglobulin A (IgA) is secreted on all mucous membranes of the respiratory tract, eyes, gastrointestinal tract, genitourinary tract, as well as through special glands around the nipple of mothers, where it protects against pathogens (including the newborn).

Immunoglobulins G (IgG) are 150 kDa monomers. This antibody class is formed only in a late defense phase, about 3 weeks after infection, and is retained for a long time. Detection indicates a passed infection or vaccination. The immunizing function is based on two antigen-bound IgG that activate the complement system. The Fc receptor mediates phagocytosis.

Immunoglobulin M (IgM) is the class of antibodies formed on first contact with antigens. IgM is a pentamer consisting of five subunits of 180 kDa each. These subunits are linked by the cysteine-rich,15 kDa joining peptide (J-chain). The antigen-antibody complex of IgM pentamers activates the classical pathway of the complement system.

Principle of the procedure

The antibody mixture is used for the qualitative detection of The antibody mixture is used for the qualitative detection of human immunoglobulins in tissue. It reacts with IgA (α-chains), IgG (γ-chains), IgM (μ-chains), and kappa and lambda light chains. Within the procedure, precise incubation times and temperatures must be followed and washing steps must be performed. Finally, the result can be assessed under a fluorescence microscope.
The antibody can also be used for other immunofluorescence techniques.

Materials provided

Primary antibody	anti IgAGM, Kappa, Lambda
Host	Rabbit
Clone	polyclonal
Immunogen	human IgA, IgG, IgM, Kappa and Lambda K
Antibody concentrate	Concentrated antibody in TRIS (pH 7.4) with < 0.1% sodium azide and sera
Recommended working dilution range	1:20
Ready-to-use antibody	Prediluted antibody in TRIS (pH 7.4) with < 0.1% sodium azide and sera
molar FITC/Protein-ratio	2.5

Product label shows the specific lot number.

Prediluted antibody is ready-to-use and optimized for staining. No further dilution, reconstitution, mixing, or titration is needed.
Antibody concentrate is optimized for dilution within dilution range using ProTaqs® Antibody Diluent for IHC (Cat. No. 400100299). Indicated dilution range should be considered as recommendation and depends on different factors (tissue, fixation, incubation conditions, etc.). Optimum titration to be determined in the user's own system.

Materials required but not provided

The following materials may be required for staining but are not provided with the primary antibody.
- Positive and negative controls
- Microscope slides (positively charged) and cover slips
- Water bath, e.g. Tissue Float Bath (Cat. No. 990100720)
- Humidified chamber, e.g. Slide Humidore (Cat. No. 990100200)
- Staining jars
- Timer
- Xylene or xylene alternative, e.g. ProTaqs® Clear (Cat. No. 400301105)
- Ethanol
- Deionized or distilled water
- Antibody diluent, e.g. ProTaqs® Antibody Diluent for IHC (Cat. No. 400100199)
- Antigen retrieval reagent, e.g. ProTaqs® Antigen Enhancer I (Cat. No. 401602092) or ProTaqs® Antigen Enhancer IV (Cat. No. 401602392)
- Detection system, e.g. ProTaqs® Essencial with AEC (e.g. Cat. No. 300120300) or ProTaqs® Essencial with DAB (e.g. Cat. No. 300120200)
- Wash buffer: TBS (Cat. No. 402000192) or TBS-Tween20 (Cat. No. 402000492)

Storage and handling

Store at 2 – 8 °C.

When stored correctly, the antibody is stable to the expiration date indicated on the vial. Do not use after expiration date.
To ensure proper reagent delivery and stability of the antibody, replace the dispenser cap after every use and immediately place the bottle into the fridge in an upright position.

Specimen preparation

Routinely processed, FFPE tissues are suitable for use with this primary antibody when used with ProTaqs® detection kits (see section "Materials required but not provided"). The recommended tissue fixative is 10% neutral buffered formalin. Variable results may occur as a result of prolonged fixation or special processes such as decalcification of bone marrow preparations. Thickness of

tissue sections should be 2 – 5 µm. Slides should be stained as soon as possible, as antigenicity of cut tissue sections may diminish over time.
It is recommended to stain positive and negative controls simultaneously with unknown specimens.
The optimum pretreatment protocol must be determined in the user's own system.

Warnings and precautions

1. Application only by qualified and trained personnel.
2. There are no estimated health risks, if the product is used as directed. MSDS is available on request.
3. Product contains sodium azide as preservative. Sodium azide is toxic. The concentration of sodium azide in this reagent is < 0.1% and is not classified hazardous. See MSDS.
4. As with any product derived from biological sources, proper handling procedures should be used.
5. Do not use reagents after expiration date.
6. Do not use the reagents if the packaging is damaged.
7. Take appropriate precautions when handling reagents. Wear appropriate protective clothing during work.
8. All hazardous materials should be disposed according to guidelines for hazardous waste disposal. Materials of human or animal origin should be handled as biohazardous materials and disposed of with proper precautions.
9. Avoid microbial contamination of reagents as it may cause incorrect results.

Quality control procedures

Positive tissue control
A positive tissue control must be run with every staining procedure performed for monitoring the correct performance of processed tissues and test reagents.
If the positive tissue controls fail to demonstrate appropriate positive staining, results with the test specimens must be considered invalid.

Negative tissue control
Negative tissue controls provide an indication of non-specific background staining. If a strong staining provides the impression of a specific staining, results with the patient specimens must be considered invalid.

Discrepancies
If quality control results do not meet specifications, patient results are invalid. Identify and correct the problem, then repeat the entire procedure with the patient samples.

Negative control reagent
A negative control reagent is used in place of the primary antibody to evaluate non-specific staining. Host species and incubation time should be similar to primary antibody.

Interpretation of results

At the end of the procedure, there is a fluorescence-labeled area at the antigen site localized by the antibody.

A qualified pathologist experienced in immunohistochemistry procedures must evaluate positive and negative tissue controls before interpreting patient specimens.
Positive staining intensity should be assessed within the context of any background staining of the negative reagent control.
Note: A negative result means that the antigen in question was not detected, not that the antigen is absent in the cells or tissue assayed. A panel of antibodies may be used to verify the results. Additionally, the morphology of each tissue sample should be examined utilizing a hematoxylin and eosin stained section. A qualified pathologist must interpret the patient's morphologic findings and pertinent clinical data.

Troubleshooting

1. immunohistochemistry is a complex process and requires special training in the selection of suitable tissues, reagents, fixation and preparation, correct slide preparation, choice of detection system and interpretation of staining results.
2. Staining results depend on the handling and preparation of the tissue sample prior to the staining process: improper freezing, thawing, washing, drying, fixing, cutting, heating, or contamination may result in artifacts, antibody inclusion, or false results.
3. Examine only intact cells for interpretation of results, as degenerated cells may cause unspecific staining.
4. If no staining is performed, check the order in which the reagents are used. The instructions for use must be strictly followed.
5. Do not allow tissue sections to dry out during staining.
6. In case of weak staining, ensure incubation times and temperatures as well as good dabbing of the solutions during the staining steps.
7. Avoid excess background staining by good removal of kerosene, good rinsing of tissue sections and optimal dilution of the primary antibody.
8. Excessive or incomplete counterstaining may influence the interpretation of the results.
9. Sodium azide inactivates horseradish peroxidase, which may lead to false results. Always wash the tissue sections in sodium azide-free buffer.
10. Do not further dilute pre-dilute/ready-to-use reagents, this may lead to erroneous results.
11. Dilute concentrated reagents for the respective use only after successful validation. Appropriate controls must be performed and recorded.
12. quartett customer service can be contacted in case of further uncertainties.

Limitations

Errors excepted.
For *in vitro* diagnostic use. For laboratory use only.
This data sheet contains general information. Optimum performance requires appropriate specimen handling, preparation, and storage as described. The performance of the product was established using the procedures provided in this package insert only and modifications to these procedures may lead to changes in efficiency. Non-application as prescribed in this data sheet leads to loss of all liability. Optimal performance requires adequate specimen quality as well as appropriate sample preparation. Application in combination with diagnostic devices requires prior validation. Any changes in product, composition, implementation, as well as use in combination with any reagents other than recommended herein is not allowed; users are responsible themselves for those changes and have to perform prior validation. The manufacturer is not liable for incorrect results and events resulting thereof, as well as for incorrect results due to visual evaluation.
Only authorized and skilled personnel may use the product. The clinical interpretation of any test results should be evaluated within the context of the patient's medical history and other diagnostic laboratory test results. A qualified pathologist must perform evaluation.
We do not take responsibility for any possible damage including personal injury, time or effort on economic loss caused by this product. Our warranty is limited to the price paid for the product.

Literature

[1] Clemmensen I. Three new E-antigenic fibrinogen fractions found in a commercial plasmin preparation. Science Tools, LKB Instr J 1973;20:7-8.

Distributor

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Change(s) made: Company logo, section ‘Distributor’, ‘Manufacturer’

Explanation of symbols

REF	Bestellnummer Catalog number		Verwendbar bis Use by
LOT	Chargenbezeichnung Batch code	2 °C 8 °C	Temperaturbegrenzung Temperature limitation
IVD	In Vitro Diagnostika In vitro diagnostic agent		Bei beschädigter Verpackung nicht verwenden Do not use if package damaged
	Hersteller Manufacturer		Gebrauchsanweisung beachten Consult instructions for use
	Achtung Caution		