

Mouse anti-Human IgG4 Monoclonal Antibody | anti-IgG4 antibody

IgG4

CATALOG # AAA59276	HOST Mouse	REACTIVITY Human	APPLICATIONS Immunohistochemistry
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PRODUCT SYNONYMS

IgG4; Monoclonal Antibody; anti-IgG4 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	BSB-96
Form/Format	IgG4 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.
Applicable Applications for anti-IgG4 antibody	IHC (Immunohistochemistry)
Intended use	This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified professional.
Immunogen	Purified human IgG4
Localization	Cytoplasmic
Control	Tonsil, Spleen, Colon
Reactivity	Paraffin, Frozen
Precautions	1. For professional users only. Ensure results are interpreted by a medical professional. 2. This product contains sodium azide (NaN₃), a toxic chemical which may react with plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent sodium azide build-up. 3. Ensure proper handling procedures are used with reagent. Always wear proper laboratory equipment such as laboratory coat and gloves when handling reagents. 4. Unused solution should be disposed of according to local and federal regulations. 5. Do not ingest reagent. If reagent ingested, contact a poison control center immediately. 6. For complete recommendations for handling biological specimens please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Laboratories" (5).
Specimen Preparation	Paraffin sections:The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation to ensure best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using ImmunoDNA Retriever with Citrate. ImmunoDNA Retriever with EDTA or ImmunoDNA Digestor. Tissue should remain hydrated using Immuno/DNA Washer solutions. Frozen sections and cell preparations: The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

Staining Procedure

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positive charged slides such as Hydrophilic Plus Slides. .
2. Air dry for 2 hours at 58° C. .
3. Deparaffinize, dehydrate and rehydrate tissues. .
4. Subject tissues to heat epitope retrieval using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate or EDTA. .
5. Any of three heating methods may be used: .
 - a. TintoRetriever Pressure Cooker or Equivalent**
Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature. .
 - b. TintoRetriever PT Module or Water Bath Method.**
Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes. .
 - c. Conventional Steamer Method.**
Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a Steamer, cover and steam for 30-60 minutes. .
6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes. .
7. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
8. Wash slides with IHC wash buffer or DI water.
9. Continue IHC staining protocol.

Product Limitation

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a medical professional.

Preparation and Storage

Store at 2-8 °C. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

IMAGES

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate-Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain	Varies	Varies	Varies

Recommended IHC Protocol

Antibody Type	Dilution	Volume/Qty
Tinto Prediluted	Ready-to-Use	3.0 mL
Tinto Prediluted	Ready-to-Use	7.0 mL
Tinto Prediluted	Ready-to-Use	15.0 mL
Concentrated	1:50 - 1:200	0.1 mL
Concentrated	1:50 - 1:200	0.5 mL
Concentrated	1:50 - 1:200	1.0 mL
Control Slides	Not Applicable	5 slides

Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-IgG4 antibody

IgG4-related sclerosing disease has been recognized as a systemic disease entity characterized by an elevated serum IgG4 level, sclerosing fibrosis and diffuse lym-phoplasmacytic infiltration with the presence of many IgG4-positive plasma cells. As these patients tend to respond favorably to steroid treatment, it is important to recognize this entity and differentiate it from such mimics as lymphoma. Clinical manifestations are apparent in the pancreas, bile duct, gallbladder, lacrimal gland, salivary gland, retroperitoneum, kidney, lung, breast, thyroid, and prostate. Immunohistochemical analyses in the case of IgG4-related sclerosing disease not only exhibits significantly more IgG4-positive plasma cells in affected tissues but also significantly higher IgG4/ IgG ratios (typically > 30%).

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.