EGFR

Clone: 31G7
Mouse Monoclonal







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Inset: IHC of EGFR on a FFPE Colon Carcinoma Tissue

Intended Use

For Research Use Only.

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 medical professional.

Immunogen

EGFR derived from A-431 cells.

Summary and Explanation

Epidermal Growth Factor Receptor (EGFR) is the receptor for epidermal growth factor (EGF). It is a member of the ErbB family receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER-2 neu (ErbB-2), HER-3 (ErbB-3) and HER-4 (ErbB-4).

Antibody Type	Mouse Monoclonal	Clone	31G7	
Isotype	IgG1	Reactivity	Paraffin, Frozen	
Localization	Membranous	Control	Skin, Placenta, Testis,	
			Tonsil, Pancreas,	
			Squamos Cell	
			Carcinoma	
	Species Reactivity	Human		

Precautions

- 1. For professional users only. Results should be interpreted by a qualified medical professional.
- 2. This product contains $<\!0.1\%$ sodium azide (NaN3) as a preservative. Ensure proper handling procedures are used with this reagent.
- 3. Always wear personal protective equipment such as laboratory coat, goggles and gloves when handling reagents.
- 4. Dispose of unused solution with copious amount of water.
- 5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
- 6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
- 7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
- 8. For additional safety information refer to Safety Data Sheet for this product.
- 9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Presentation

EGFR 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.

Catalog No.	Antibody Type	Dilution	Volume/Qty
BSB 5470	Tinto Prediluted	Ready-to-Use	3.0 mL
BSB 5471	Tinto Prediluted	Ready-to-Use	7.0 mL
BSB 5472	Tinto Prediluted	Ready-to-Use	15.0 mL
BSB 5473	Concentrated	1:25 - 1:100	0.1 mL
BSB 5474	Concentrated	1:25 - 1:100	0.5 mL
BSB 5475	Concentrated	1:25 - 1:100	1.0 mL

Control Slides Available

Catalog No.	Quantity	
BSB 5476	5 slides	

Storage Store at 2-8°C

Stability

This product is stable up to the expiration date on the product label. 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.

Specimen Preparation

Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues is recommended using Bio SB ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

Frozen sections and cell preparations: The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

Staining Procedure

Pretreatment

- Cut and mount 3-4-micron formalin-fixed paraffin-embedded tissues on positive charged slides such as Bio SB Hydrophillic Plus Slides (BSB 7028).
- 2. Air dry for 2 hours at 58° C.
- 3. Deparaffinize, dehydrate and rehydrate tissues.
- 4. Subject tissues to enzymatic digestion with ImmunoDNA Digestor (BSB 0108 BSB 0112) or similar product (Proteinase K) using the following protocol:
 - 4.1 Pre-warm the ImmunoDNA Digestor solution to room temperature.
 - 4.2 Incubate tissue sections with the ImmunoDNA Digestor solution for 10 minutes at room temperature or for 5 minutes at 37 °C.

NOTE: Other enzyme treatments may reduce or eliminate the intensity of this antibody. Heat-induced epitope retrieval (HIER) yields poor results with this antibody.

- For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
- 6. Wash slides with IHC wash buffer or DI water.
- 7. Continue IHC staining protocol

Abbreviated Immunohistochemical Protocol

	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Proteinase K	5-10 min.	5-10 min.	5-10 min.
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 / Coverslip	Varies	Varies	Varies

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to Pl0174 or Pl0097.

Product Limitations

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 qualified medical professional.

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References

- 1. Cohen S, et al. J Biol Chem. 1982;257:1523
- 2. Ozane B, et al. J Pathol. 1986; 149:191
- 3. Niikura H, et al. Human Pathol. 1996; 27:282
- 4. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

Symbol Key / Légende des symboles/Erläuterung der Symbole

2.0	Storage Temperature Limites de température Zulässiger Temperaturbereich	***	Manufacturer Fabricant Hersteller	REF	Catalog Number Référence du catalogue Bestellnummer
(i)	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	\subseteq	Expiration Date Utiliser jusque Verwendbar bis	LOT	Lot Number Code du lot Chargenbezeichnung



