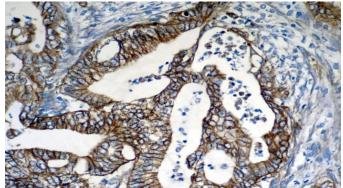


# **EGFR**

**Clone:** 31G7 Mouse Monoclonal







Inset: IHC of EGFR on a FFPE Colon Carcinoma Tissue

#### Intended Use

For In Vitro Diagnostic 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 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	lgG1	Reactivity	Paraffin, Frozen	
Localization	Membranous	Species Reactivity	Human	
Control	Skin, Placenta, Testis, Tonsil, Pancreas, Squamous Cell Carcinoma			
Application	Breast Cancer, Colon & Gastrointestinal Cancer, Lung Cancer			

#### Presentation

Anti-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.

EGFR antibody requires the use of ImmunoDNA Digestor (Cat.#'s BSB 0108, BSB 0109, BSB 0110, BSB 0111, BSB 0112) or similar Proteinase K based product as antigen retriever.

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

## Control Slides Available

Catalog No.	Quantity	
BSB-9166-CS	5 slides	

**Storage** Store at 2-8°C (Control Slides: Store at 20-25°C)

#### **Precautions**

- 1. For professional users only. Results should be interpreted by a qualified medical professional.
- 2. This product contains <0.1% sodium azide (NaN<sub>3</sub>) as a preservative. Ensure proper handling procedures are used with this reagent.
- 3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
- 4. Dispose of unused solution with copious amounts 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. For additional safety information refer to Safety Data Sheet for this product.
- 8. 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).

## **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 on acetone-fixed frozen sections and acetone-fixed cell preparations.

## **Staining Procedure**

- 1. 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.

- 5. 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

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Proteinase K	10 min	10 min	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

EGFR antibody requires the use of ImmunoDNA Digestor (Cat.#'s BSB 0108, BSB 0109, BSB 0110, BSB 0111, BSB 0112) or similar Proteinase K based product as antigen retriever.

## **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 PI0174 or PI0097.

#### **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.

#### 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.

https://www.cdc.gov/mmwr/pdf/other/su6101.pdf

Symbol Key/Légende des symboles/Erläuterung der Symbole

OAdvis EAR AB Storage Temperature Manufacturer Catalog Number Ideon Science Park EC **REP** Limites de température **Fabricant** Référence du catalogue REF Scheelevägen 17 Zulässiger Temperaturbereich Hersteller Bestellnummer SE-223 70 Lund, Sweden Read Instructions for Use In Vitro Diagnostic Medical Device **Expiration Date** Lot Number Consulter les instructions  $\prod$ i IVD Dispositif médical de diagnostic in vitro Utiliser jusque LOT Code du lot d'utilisation Verwendbar bis In-Vitro-Diagnostikum Chargenbezeichnung Gebrauchsanweisung beachten



