Epidermal Growth Factor Receptor (EGFR) Ab-3 (Clone EGFR.1)

Mouse Monoclonal Antibody

Cat. #MS-311-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)
Cat. #MS-311-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)
Cat. #MS-311-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Biotin-Labeled Ab with BSA and Azide)

Description: EGFR is type I receptor tyrosine kinase with sequence homology to erbB-1, -2, -3 -4 or HER-1, -2, -3 -4. It binds to Epidermal Growth Factor (EGF), Transforming Growth Factor-a (TGF-a), Heparin-binding EGF (HB-EGF), amphiregulin, betacellulin and epiregulin. EGFR is overexpressed in tumors of breast, brain, bladder, lung, gastric, head & neck, esophagus, cervix, vulva, ovary, and endometrium. It is predominantly present in squamous cell carcinomas.

Comments: Ab-3 does not interfere with the binding of EGF to EGFR. It is particularly well suited for immunoprecipitating the unoccupied as well as the occupied EGFR.

Mol. Wt. of Antigen: 170kDa (wild type)

Epitope: aa 6-273

Species Reactivity: Human¹ and Horse². Does not react with mouse.¹ Others-not known.

Clone Designation: EGFR.1

Ig Isotype / Light Chain: IgG2b / κ

Immunogen: A431 human epidermoid cells.¹

Applications and Suggested Dilutions:
• Flow Cytometry³
• Immunofluorescence
• Immunoprecipitation (Native only)
  (Use Protein A; Ab at 2µg/mg protein lysate)
• Western Blotting (Not suitable)
• Immunohistology (Frozen only)

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: A431 cells express only the intact and not the vIII variant of EGFR.⁴ HC2 20 d2 cells express the vIII variant.⁴ In normal breast, ducts and lobules show diffuse cytoplasmic staining.

Cellular Localization: Cell membrane

Supplied As: 200µg/ml of antibody purified from ascites fluid by Protein A chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

Storage and Stability:
Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

Limitations and Warranty:
Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:
This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only
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Additional Key References:

1. Waterfield MD; Mayes EL; Stroobant P; Bennet PL; Young S; Goodfellow PN; Banting GS; Ozanne B. A monoclonal antibody to the human epidermal growth factor receptor. Journal of Cellular Biochemistry, 1982, 20(2):149-61.
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4. Ozanne B; Richards CS; Hendler F; Burns D; Gusterson B. Over-expression of the EGF receptor is a hallmark of squamous cell carcinomas. Journal of Pathology, 1986 May, 149(1):9-14.
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