



PRODUCT DATA SHEET

Product: Anti-EGFR, clone B1D8 (azide free)

Cat. No.: MC-414 (0.1 mL)

Background:

Epidermal Growth Factor Receptor (EGFR) is a type I receptor tyrosine kinase with sequence homology to erbB-1, -2, -3, and -4 or HER-1, -2, -3 and -4. It binds to Epidermal Growth Factor (EGF) Transforming Growth Factor- α (TGF- α) 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:

The antibody blocks the EGF/TGF α -induced activation of EGFR. It also blocks tumor growth *in vivo*. The antibody is excellent for purification of EGFR by immunoaffinity chromatography.

Species Reactivity:

Human. Does not recognize mouse or rat. Other species not tested.

Ig Isotype:

Mouse IgG_{2a/k}

Immunogen:

Microsomes from A431 cells

Epitope:

Extracellular domain

Mol. Wt of Antigen:

170 kDa (wild type) and 145 kDa (vIII variant)

Cellular Location:

Cell Membrane

Format:

0.1 mL of 1 mg/mL solution of purified by Protein A chromatography from ascites fluid. Prepared in 10 mM PBS, pH 7.4.

Positive Control:

A431 cells

Storage:

Stable up to 36 months when stored at -20°C. Aliquot to avoid freeze/thaw cycles.

Applications and Suggested Dilutions:

- Affinity purification
- Blocks ligand-induced activation of EGFR
- Inhibits proliferation of A431 cells
- Arrests tumor growth *in vivo*
- Immunoprecipitation: Native only. Use antibody at 2 μ g/mL with Protein A.
- Flow cytometry

Note: Not suitable for Western blots.

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

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.