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#3197

EGF Receptor (L858R Mutant Specific) (43B2) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, W-S, IP, IHC-P, IF-IC, FC-FP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 175	Source/Isotype: Rabbit IgG	UniProt ID: #P00533	Entrez-Gene Id: 1956
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Product Usage Information

Application

Western Blotting
Simple Western™
Immunoprecipitation
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:250
1:200
1:100
1:400
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #28110.

Specificity/Sensitivity

EGFR (L858R Mutant Specific) (43B2) Rabbit mAb detects endogenous levels of EGFR mutant L858R protein. The antibody may cross-react with wildtype EGFR and other HER family members when highly over-expressed. Careful titration of this antibody may be required to obtain optimal specificity.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to L858R mutant sequence of human EGF receptor.

Background

The epidermal growth factor (EGF) receptor is a 170 kDa transmembrane tyrosine kinase that belongs to the HER/ErbB protein family. Research studies have shown that somatic mutations in the tyrosine kinase domain of EGF receptor (EGFR) are present in a subset of lung adenocarcinomas that respond to EGFR inhibitors, such as gefitinib and erlotinib (1-3). Two types of mutations account for approximately 90% of mutated cases: a specific point mutation, L858R, that occurs in exon 21 and short in-frame deletions in exon 19 (4,5). The most frequent exon 19 deletion is E746-A750, accounting for 90% of lesions at this site, although some rare variants occur.

Background References

- Lynch, T.J. et al. (2004) *N Engl J Med* 350, 2129-39.
- Pao, W. et al. (2004) *Proc Natl Acad Sci USA* 101, 13306-11.
- Haber, D.A. et al. (2005) *Cold Spring Harb Symp Quant Biol* 70, 419-26.
- Kosaka, T. et al. (2004) *Cancer Res* 64, 8919-23.
- Riely, G.J. et al. (2006) *Clin Cancer Res* 12, 7232-41.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human

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