

#3197
Store at -20C**EGF Receptor (L858R Mutant Specific) (43B2) Rabbit mAb****Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

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

Product Usage Information**Application**

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

Dilution

1:1000
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

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

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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