Revision 3

Store at -20C

#12048

EREG (D4O5I) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	17,19, 30	Rabbit IgG	#O14944	2069

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	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.

Specificity/Sensitivity

EREG (D4O5I) Rabbit mAb recognizes endogenous levels of proepiregulin and the C-terminal propeptide of the EREG protein. It does not recognize the mature form of EREG.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu155 of human EREG protein.

Background

Epiregulin (EREG) belongs to the epidermal growth factor (EGF) family and is a ligand for the EGF receptor (EGFR) and ErbB4 (1-3). The binding of EREG to homodimers, as well as heterodimers containing EGFR or ErbB4, leads to receptor activation and downstream signaling to promote cell growth and proliferation (4-6). In normal human tissue, moderate levels of EREG are expressed in the placenta and peripheral blood macrophages. Research studies have shown that EREG is expressed at high levels in numerous cancer cell lines, and EREG expression is correlated with primary cancer aggresiveness/metastases (7-11). In addition to its involvement in tumorigenesis, a variant of EREG has also been shown to be associated with tuberculosis susceptibility (12). EREG is synthesized as a ~30 kDa glycosylated membrane bound proepiregulin form (19 kDa when not glycosylated) and through subsequent proteolytic cleavage is processed to a 17 kDa C-terminal propeptide, and the 6kDa mature form of epiregulin (13).

Background References

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11. Sunaga, N. et al. (2012) *Oncogene* , .
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13. Baba, I. et al. (2000) *Cancer Res* 60, 6886-9.

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 **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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