

Rabbit Anti-EGFR [EP22]: RM0089, RM0089RTU7

Intended Use: For Research Use Only

Description: Epidermal growth factor receptor (EGFR) is a 170 kDa transmembrane glycoprotein receptor tyrosine kinase that is activated by epidermal growth factor affects cell growth and differentiation. Binding of EGF or TGF alpha to EGFR activates tyrosine kinase activity of the receptor. Phosphorylation of Tyr 992, Tyr 1068 and Tyr 1086 is required for conformational change in the C-terminal of EGFR. Autophosphorylation of Tyr 992 creates a binding site for the phospholipase C-gamma (PLC-gamma) SH2 domain, inducing downstream signaling. In breast cancer, EGFR is predominately expressed in basal cell-like carcinoma, it has been recommended for identification of basal-like breast carcinoma along with Cytokeratin 5/6.

Specifications

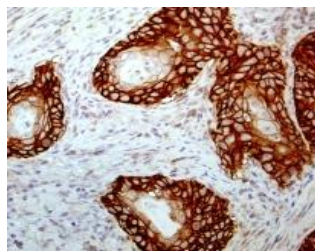
Clone: EP22
 Source: Rabbit
 Isotype: IgG
 Localization: Cytoplasm, membrane
 Formulation: Purified and diluted in PBS pH 7.2 containing < 1% BSA and < 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
EGFR Concentrated	RM0089	1ml
EGFR Prediluted	RM0089RTU7	7ml

IHC Procedure*

Positive Control Tissue: Lymph node metastasis tissue
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH 6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human squamous carcinoma tissue stained with anti-EGFR using DAB

References:

1. Tyrosine kinase receptor expression in chordomas: phosphorylated AKT correlates inversely with outcome. de Castro CV et al. Hum Pathol 44:1747-55 2013.
2. Acetyl-11-keto-beta-boswellic acid (AKBA) prevents human colonic adenocarcinoma growth through modulation of multiple signaling pathways. Yuan Y et al. Biochim Biophys Acta 1830:4907-16 2013.
3. Axl mediates acquired resistance of head and neck cancer cells to the epidermal growth factor receptor inhibitor erlotinib. Giles KM et al. Mol Cancer Ther 12:2541-58 2013.
4. Predictors of outcome in an AIEOP series of childhood ependymomas: a multifactorial analysis. Modena P et al. Neuro Oncol 14:1346-56 2012.
5. Dependence on the MUC1-C oncoprotein in non-small cell lung cancer cells. Raina D et al. Mol Cancer Ther 10:806-16 2011.
6. Loss of BRCA1 leads to an increase in epidermal growth factor receptor expression in mammary epithelial cells, and epidermal growth factor receptor inhibition prevents estrogen receptor-negative cancers in BRCA1-mutant mice. Burga LN et al. Breast Cancer Res 13:R30 2011.
7. Mammary tumorigenesis induced by fibroblast growth factor receptor 1 requires activation of the epidermal growth factor receptor. Bade LK et al. J Cell Sci 124:3106-17 2011.

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Rev. A