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Product Datasheet EGFR Antibody (orb169711)

Description Mouse Monoclonal antibody to EGFR. The epidermal growth factor receptor (EGF R) subfamily of receptor tyrosine kinases comprises four members: EGF R (also known as HER1, ErbB1 or ErbB), ErbB2 (Neu, HER-2), ErbB3 (HER-3), and ErbB4 (HER-4). All family members are type I transmembrane glycoprotein that has an extracellular domain which contains two cysteine-rich domains separated by a spacer region that is involved in ligand-binding, and a cytoplasmic domain which has a membrane-proximal tyrosine kinase domain and a C-terminal tail with multiple tyrosine autophosphorylation sites. The human EGF R gene encodes a 1210 amino acid (aa) residue precursor with a 24 aa putative signal peptide, a 621 aa extracellular domain, a 23 aa transmembrane domain, and a 542 aa cytoplasmic domain. EGF R has been shown to bind a subset of the EGF family ligands, including EGF, amphiregulin, TGF-, betacellulin, epiregulin, heparinbinding EGF and neuregulin-2 in the absence of a co-receptor. Ligand binding induces EGF R homodimerization as well as heterdimerization with ErbB2, resulting in kinase activation, tyrosine phosphorylation and cell signaling. EGF R can also be recruited to form heterodimers with the ligand-activated ErbB3 or ErbB4. EGF R signaling has been shown to regulate multiple biological functions including cell proliferation, differentiation, motility and apoptosis. In addition, EGF R signaling has also been shown to play a role in carcinogenesis. Reactivity Human Conjugation Unconjugated Immunogen Anti-human EGFR mAb, is derived from hybridization of mouse FO myeloma cells with spleen cells from BALB/c mice immunized with recombinant human EGFR amino acids 424-605 purified from E. coli **Preservatives** 1mg/ml containing PBS, pH-7.4, & 0.1% Sodium Azide. Form/Appearance Sterile filtered colorless solution. Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -Storage 20°C in small aliquots to prevent freeze-thaw cycles. Note For research use only

Biorbyt Ltd.

7 Signet Court, Swann's Road, Cambridge, CB5 8LA, United Kingdom Email: <u>info@biorbyt.com</u>, <u>support@biorbyt.com</u> Phone: <u>+44 (0) 1223 859-353</u> | Fax: <u>+1 (415) 651-8558</u>

Biorbyt LLC.

68 TW Alexander Drive, Durham, NC, 27713, United States Email: <u>info@biorbyt.com</u>, <u>support@biorbyt.com</u> Phone: <u>+1 (415) 906-5211</u> | Fax: <u>+1 (415) 651-8558</u>



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Application notes	Applications: EGFR antibody has been tested by ELISA, Western blot analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended dilution range for Western blot analysis is 1:500 ~ 1000.Recommended starting dilution is 1:500
lsotype	Mouse IgG2b heavy chain and k light chain
Clonality	Monoclonal
Clone Number	PAT6E3AT
Expiration Date	12 months from date of receipt.

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