

Product datasheet for **AM00031FC-N**

EGFR pTyr869 Mouse Monoclonal Antibody [Clone ID: 12A3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	12A3
Applications:	IF
Recommended Dilution:	Immunocytochemistry: Use at 1-10 µg/ml Use AM00031PU-N or AM00031BT-N for Immunoblotting and Immunoprecipitation applications.
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Phosphopeptide conjugated to KLH
Specificity:	Clone 12A3 specifically recognizes EGFR phosphorylated at Tyrosine 869 and detects EGFR activation after interaction with src kinases. Antibody AM00031FC-N does not crossreact with the highly homologues pTyr877 of activated erbB2.
Formulation:	PBS containing 0.09% Sodium Azide / PEG and Sucrose. Label: FITC State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Subsequent Thiophilic Adsorption and Size Exclusion Chromatography.
Conjugation:	FITC
Storage:	Aliquote and freeze in liquid nitrogen. Antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed Aliquots may be stored at 4°C up to 3 months.
Gene Name:	Homo sapiens epidermal growth factor receptor (EGFR), transcript variant 1
Database Link:	Entrez Gene 13649 Mouse Entrez Gene 1956 Human P00533



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Background:	<p>EGFR/erbB receptors are activated upon binding of EGF and EGF-related growth factors such as TGF alpha, beta-cellulin, Hb-EGF, HRG, or NRG. Binding of these ligands leads to receptor homo- and heterodimerization followed by autophosphorylation and activation of downstream signal transduction pathways (MAPK, PI3K/PKB, and STAT). In addition, EGFR becomes fully activated after phosphorylation of Y869 by src family kinases. Phosphorylation of Y1069 leads to association with cbl and subsequent receptor degradation. Phosphorylation of S1071 by CamKinase II leads to attenuation of kinase activity; phosphorylation of T678 (by PKC) and T693 (by MAPK, p38) interferes with receptor endocytosis/recycling.</p>
Synonyms:	Epidermal growth factor receptor, EGF Receptor, erbB-1, c-ErbB-1
Note:	Mol. weight of antigen: 180 kD
Protein Families:	Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Secreted Protein, Stem cell relevant signaling - JAK/STAT signaling pathway, Transmembrane
Protein Pathways:	Adherens junction, Bladder cancer, Calcium signaling pathway, Colorectal cancer, Cytokine-cytokine receptor interaction, Dorso-ventral axis formation, Endocytosis, Endometrial cancer, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, MAPK signaling pathway, Melanoma, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton