

Product datasheet for AP20828PU-M

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EGFR pTyr1172 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WE

Recommended Dilution: Western blot: 1/500 - 1/1000.

Reactivity: Human, Mouse, Rat

Host: Rabbit
Clonality: Polyclonal

Specificity: This antibody detects endogenous levels of EGFR protein only when phosphorylated at

Tyr1148 (removal of the signal peptide).

Formulation: Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified lg fraction Preservative: 0.05% sodium azide

Concentration: 1.0 mg/ml

Purification: Affinity chromatography (> 95% (by SDS-PAGE)

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~ 175 kDa

Gene Name: epidermal growth factor receptor

Database Link: Entrez Gene 13649 MouseEntrez Gene 24329 RatEntrez Gene 1956 Human

P00533





Background:

Epidermal growth factor mediates its effects on cell growth through its interaction with a cell surface glycoprotein designated the EGF receptor. Binding of EGF or TGFalpha to the EGF receptor activates tyrosine-specific protein kinase activity intrinsic to the EGF receptor. The carboxy-terminal tyrosine residues on EGFR, Tyr 1068 and Tyr 1173, are the major sites of autophosphorylation, which occurs as a result of EGF binding. Once activated, EGFR mediates the binding of the phosphotyrosine binding (PTB) domain of GRB2 through direct interactions with Tyr 1068 and Tyr 1086 and through indirect interactions with Tyr 1173 in the Ras signaling pathway. Tyr 1173 of EGFR also functions as a kinase substrate. Phosphorylation of Tyr 992, Tyr 1068 and Tyr 1086 is required for conformational change in the C-terminal tail of the EGF receptorgulates Actin filament accumulation at the plasma membrane and Cdc42 stimulates formation of filopodia.

Synonyms: Epidermal growth factor receptor, EGF Receptor, erbB-1, c-ErbB-1

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

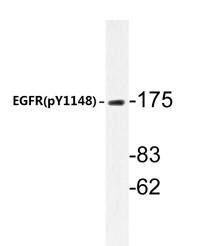
Protein Pathways: Adherens junction, Bladder cancer, Calcium signaling pathway, Colorectal cancer, Cytokine-

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

Product images:



Western blot (WB) analyzes of p-EGFR antibody (Cat.-No.: [AP20828PU-N]) in extracts from HepG2 cells.