

### Certificate of Analysis

**Product:** Affinity Purified Anti-Epidermal Growth Factor Receptor (EGFR) [Rabbit]

**Code:** 600-401-905

**Lot #:** 16873

**Size:** 100 µg

**Physical State:** Liquid (sterile filtered)

**Antibody Concentration:** 1.0 mg/ml (by UV absorbance at 280 nm)

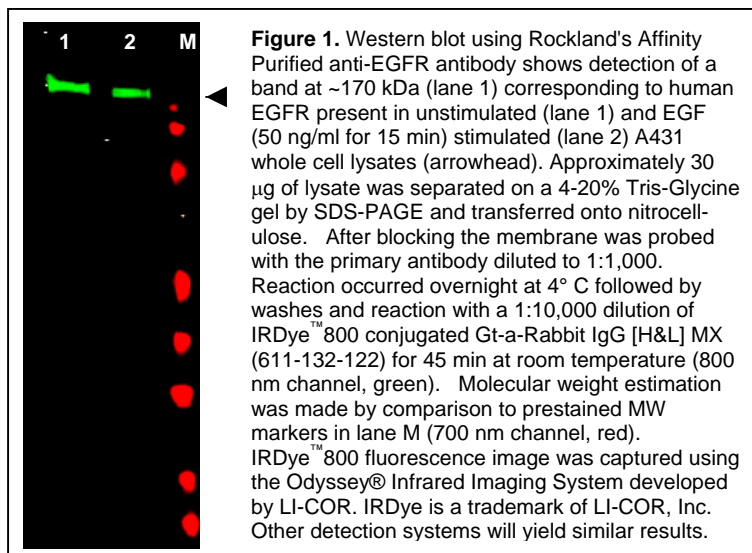
**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

**Stabilizer:** None

**Preservative:** 0.01% (w/v) Sodium Azide

**Storage Conditions:** Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

**General Background:** EGFR is a transmembrane glycoprotein that is a member of a family of protein tyrosine kinases crucial in maintaining a normal balance in cell growth and development. Growth factor receptors are involved not only in promoting the proliferation of normal cells but also in the aberrant growth of many types of human tumors. For example, the epidermal growth factor receptor (EGFR) is mutated and/or overexpressed in many common solid human squamous cell carcinomas including breast, brain, bladder, lung, gastric, head & neck, esophagus, cervix, vulva, ovary, and endometrium. Over-expression of the EGFR gene occurs in carcinomas with and without gene amplification. EGFR and erbB-2 are particularly important in breast cancer because increased production or activation has been associated with poor prognosis. EGFR belongs to a family of growth factor receptors, which also includes ErbB-2/HER-2/neu, ErbB-3/HER-3/neu and ErbB-4/HER-4/neu. EGFR can heterodimerize with each of the members of this family.



**Application Note(s):** This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 170 kDa in size corresponding to EGFR protein by western blotting in the appropriate cell lysate or extract. This antibody detects both non-phosphorylated and phosphorylated EGFR at residue Y1197.

<b>Recommended Dilutions:</b>	<b>ELISA</b>	1:8,000 - 1:32,000
	<b>WESTERN BLOT</b>	1:500 - 1:5,000
	<b>IMMUNOHISTOCHEMISTRY</b>	User Optimized
	<b>OTHER APPLICATIONS</b>	User Optimized

**Purity and Specificity:** This antiserum is directed against human epidermal growth factor receptor (EGFR) and is useful in determining its presence in ELISA and western blotting experiments. This antibody can detect EGFR from human, mouse and rat sources. Reactivity of this antibody with EGFR from other species is unknown.

**Relevant Link(s):**

Swiss Prot: [P00533](#)

NCBI Link [NP\\_005219](#)

**Immunogen:** This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 1189-1199 of human EGFR protein.

**Protein Sequence:** Human EGFR, 1210 aa, predicted MW 134.2 kDa

1	mrpsgtagaa	llallaalcp	asraleekkv	cqgtsnklq	lgtfedhfls	lqrmfnncev
61	vlgnlcityv	qmydlslfk	tiqevagyvl	ialntverip	lenlqiirgn	myyensyala
121	vlsnydankt	glkelpmrnl	qeihgavrf	snnpalcnve	siqwrdivss	dflsnmsmdf
181	qnhlgscqkc	dpscpngscw	gagcencqkl	tkiicaqqcs	grcrgkpspd	cchnqcaagc
241	tgpresdclv	crkfrdeatc	kdtcpplmly	npttyqmdvn	pegkysfgat	cvkkcprnyv
301	vtdhgscvra	cgadsyemee	dgvrkckkce	gpckrvncgi	gigefkdsls	inatnikhfk
361	nctsisgdh	ilpvafrgds	fthtppldpq	eldilktvke	itgflliqaw	penrdlhaf
421	enleiirgrt	kqhggqslav	vslnitslgl	rslkeisdgd	viisgnknlc	yantinwkkk
481	fgtsgqtki	isnrgensck	atqqvchalc	spcgwgppep	rdcvscrnvs	rgrecvdckn
541	llegeprefv	enseciqchp	eclpqamnit	ctgrgpndci	qcahyidgph	cvktcpagvm
601	genntlvwky	adaghvchlc	hpnctygctg	pglegcptng	pkipsiatgm	vgalllllv
661	algjglfmrr	rhivrkrtr	rlqerelve	pltpsgeapn	qallrilket	efkkikvlgs
721	gafgtvykgl	wipegekvki	pvaikelrea	tspkankeil	deayvmavsd	nphvcrligi
781	cltstvqlit	qlmpfgclld	yvrehkdnig	sqyllnwcvc	iakgmnyled	rrlvhrdlaa
841	rnvlvktpqh	vkitdfglak	llgaekeyh	aeggkvpikw	malesilhri	ythqsdvwsy
901	gvtvwelmtf	gskpydgjpa	seissilekg	erlpqpict	idvymimvkc	wmidadsrpk
961	freliiefsk	mardpqrylv	iqgdermhlp	sptsdnfyra	lmdeedmddv	vdadeyilpq
1021	qgffsspsts	rtplsslsa	tsnnstvac	drnglqscpi	kedsflqrys	sdptgalted
1081	siddtflpvp	eyinqsvpkr	pagsvqnpvy	hnqplnpaps	rdphyqdpsh	tavgnpeyln
1141	tvqptcvnst	fdspahwaqk	gshqisldnp	dyqqdffpke	akpngifkgs	<b>taenaeylr</b>
1201	apqssefiga					

**Reference(s):**

Sartor, C.I. et al., (1997) The Role of EGF Receptor and STAT-3 Activation in Autonomous Proliferation of SUM-102PT Human Breast Cancer Cells. *Cancer Research* **57**:978.

Scambia G, et al., (1993) Expression of ras oncogene p21 protein in normal and neoplastic ovarian tissues: Correlation with histopathological features and receptors for estrogen, progesterone, and the epidermal growth factor. *Am J Obstet gynecol* **168**:71-78.

Henzen-Logmans, S.C., et al., (1993) Occurrence of epidermal growth factor receptors in benign and malignant ovarian tumors and normal ovarian tissues: an immunohistochemical study. *J Can Res Clin Oncol* **118**:303-307.

[Sibilia, M., A.B. et al., \(2000\). The EGF Receptor Provides an Essential Survival Signal for SOS-Dependent Skin Tumor Development. \*Cell\* \*\*102\*\*, 211-220.](#)

**Related Products:**

#100-401-149	Anti-Epidermal Growth Factor Receptor (EGFR) (aa 1168-1181) RABBIT
#600-401-905	Affinity Purified Anti-Epidermal Growth Factor Receptor (EGFR) (aa 1189-1199) RABBIT
#600-401-928	Affinity Purified Anti-Epidermal Growth Factor Receptor (EGFR) pY1197 RABBIT
#W09-000-361	A431 Whole Cell Lysate in SDS-PAGE Sample Buffer
#611-703-127	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
#611-132-122	IRDye800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
#KIA-003	<b>MaxTag</b> <sup>TM</sup> Anti-RABBIT IgG Kit for Immunoblotting
#MB-070	Blocking Buffer for Fluorescent Western Blotting
#B501-0500	BLOTTO
#BSA-30	30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer)

**USDA Certification:** All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

**Note:** This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.