

Certificate of Analysis

Product: Affinity Purified Anti-Elg-1 (Rabbit)

Code: 600-401-688

Lot #: 14574

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 0.50 mg/ml (by UV absorbance at 280 nm)

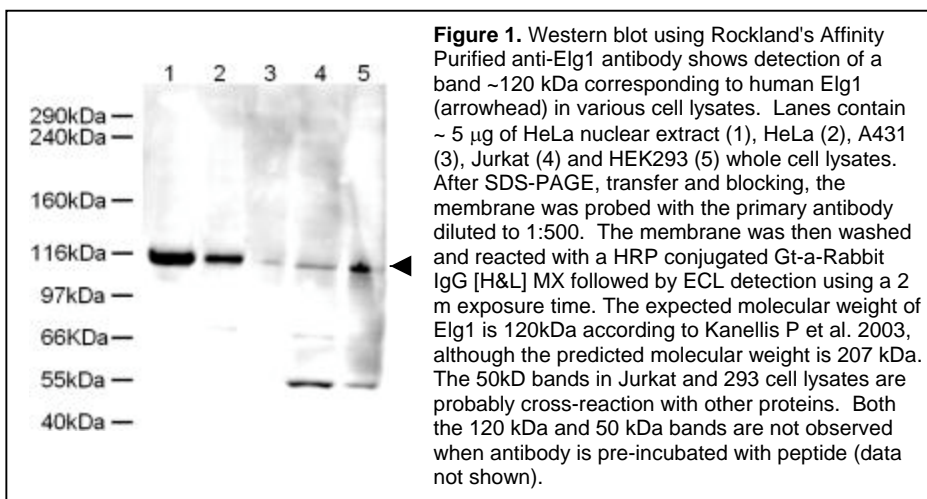
Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

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.

Background: ELG1 (also known as ATP(GTP)-binding protein or Chromosome fragility associated gene 1) is involved in a novel RFC complex that is probably involved in DNA damage and repair by ensuring replication fidelity. This antibody detects a band at about 120kDa in HeLa, A431, Jurkat and HEK193 cells. This corresponds to the band size seen in Kanellis P et al. It remains unclear why the band size detected is much less than the 207kDa predicted in the protein sequence corresponding to CACC44537.2 (Q96QE3), but as our results correspond to those seen in Kanellis P et al. it is likely that the 120 kDa target is ELG1.



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 120 kDa in size corresponding to Elg1 by western blotting in the appropriate cell lysate or extract.

Recommended Dilutions:

ELISA	1:3,000 - 1:15,000
WESTERN BLOT	1:500 - 1:2,000
IF MICROSCOPY	User Optimized
OTHER APPLICATIONS	User Optimized

Purity and Specificity: This affinity purified antibody is directed against human Elg1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis of the immunogen suggest full to partial reactivity with several hypothetical proteins. This is not unexpected for such a novel protein. The following proteins should be considered to be highly homologous to Elg1 when using this antibody: human chromosome fragility associated gene 1 (NP_079133), hypothetical dog protein FLJ12735 (XP_548276), hypothetical chimpanzee protein FLJ12735 (XP_511388), and a hypothetical human protein of 1224 residues (CAH10412). All show 100% homology to the immunogen. Reactivity against homologues from other sources is not known.

Relevant Link(s): Swiss Prot: [Q96QE3](#) NCBI Link [CAC44537](#)

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 63-76 of Human Elg 1.

Protein Sequence: Human ELG1, 1844 aa, predicted MW 207.6.2 kDa

1	mvglamaaaa	aapppvkdc	iepckkrkkd	ddtstcktit	kylsplgktr	drvfappkps
61	nildyfrkts	ptnektqlgk	eckikspesv	pvdsnkdctt	plemfsnvef	kkkrkrvnls
121	hqlnnikten	eapieissdd	skedyslnd	fvesstsvlr	ykkqevlae	niqdtksqpn
181	tmtslqnskk	vnpkqgttkn	dfkklrkrkc	rdvvdlsef	plaeelnllk	kdgkdtkqme
241	nttshansrd	nvteaaqlnd	siitvsyeef	lkshkenkve	eipdstmsic	vpsetvdeiv
...						
1561	sqkkkqkktl	vildsdldfd	tdldfpdqsi	slssvsssn	aeesktgdee	skardkgnp
1621	etkksipcpp	kttagkkcsa	lvshclnsls	efmdnmsfld	alldvreqn	kygrndfswt
1681	ngkvtsglcd	efslesndgw	tsqssgelka	aaealsftkc	ssaiskalet	lnsckklgrd
1741	ptndltfyvs	qkrnnvyfsq	saanldnawk	risviksvfs	srslyvgnr	qasiieylpt
1801	lnricktekl	keqgkskrff	lhfyegihid	ipketvntla	adfp	

General References:

Kanellis P *et al.* (2003) Elg1 forms an alternative PCNA-interacting RFC complex required to maintain genome stability. *Curr Biol* **13**:1583-95.

Jenne, D.E., Tinschert, S., Stegmann, E., Reimann, H., Nurnberg, P., Horn, D., Naumann, I., Buske, A. and Thiel, G. (2000) A common set of at least 11 functional genes is lost in the majority of NF1 patients with gross deletions. *Genomics* **66** (1), 93-97.

Related Products:

#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
#MB-070	Blocking Buffer for Fluorescent Western Blotting
#KIA-003	MaxTag TM Anti-RABBIT IgG Kit for Immunoblotting
#MB-070	Blocking Buffer for Fluorescent Western Blotting

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.