

### Product Specification Sheet

**Product:** Affinity Purified Anti-Human AP1G1 (Goat)

**Code:** 600-101-289

**Lot #:** 13803

**Size:** 100 µg

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

**Antibody Concentration:** 0.7 mg/ml (by UV absorbance at 280 nm)

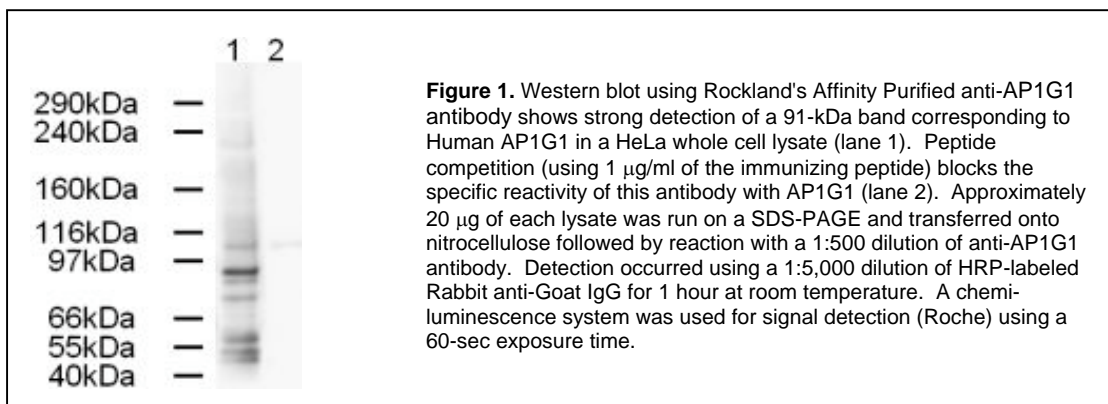
**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

**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 Information:** AP1G1 (also known as gamma 1 subunit of adaptor -related protein complex 1, Gamma-adaptin, Adaptor protein complex AP-1 gamma-1 subunit, Golgi adaptor HA1/AP1 adaptin gamma-1 subunit and Clathrin assembly protein complex 1 gamma-1 large chain) is a subunit of clathrin-associated adaptor protein complex 1 that plays a role in protein sorting in the late-Golgi/trans-Golgi network (TGN) and/or endosomes. The AP complexes mediate both the recruitment of clathrin to membranes and the recognition of sorting signals within the cytosolic tails of transmembrane cargo molecules. The adaptin family of proteins is composed of four classes of molecules named alpha, beta-, beta prime- and gamma- adaptins. Adaptins, together with medium and small subunits, form a heterotetrameric complex called an adaptor, whose role is to promote the formation of clathrin-coated pits and vesicles. AP1G1 is localized to the coat surrounding the cytoplasmic face of coated vesicles located at the Golgi complex and is widely expressed.



**Application Note(s):** This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 91 kDa in size corresponding to AP1G1 by western blotting in the appropriate cell lysate or extract.

<b>Recommended Dilutions:</b>	<b>ELISA</b>	1:2,000 - 1:8,000
	<b>WESTERN BLOT</b>	1:500 - 1:2,000
	<b>IF MICROSCOPY</b>	User Optimized
	<b>OTHER APPLICATIONS</b>	User Optimized

**Purity and Specificity:** : This affinity purified antibody is directed against human AP1G1. The product was affinity purified from antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, chimpanzee and orangutan based on 100% homology for the immunogen sequence. Cross reactivity with AP1G1 protein from mouse, rat, dog and chicken may occur as sequence homology varies by only one amino acid residue in this sequence as indicated by BLAST analysis. Reactivity with AP1G1 proteins from other sources is not known.

**Relevant Link(s):** Swiss Prot: [O43747](#) NCBI Link [NP\\_001119](#)

**Protein Sequence:** Human AP1G1, 825 aa, predicted MW 91.7 kDa

1	mpapirlrel	irtirtartq	aeeremiqke	caairssfre	edntycrcnv	akllymhmlg
61	ypahfgqlec	lkliasqkft	dkrigylgam	lllderqdvh	llmtnciknd	lnhstqfvqg
121	lalctlgcmg	ssemcrdlag	eveklktsn	sylrkaalc	avhvirkvpe	lmemflpatk
181	nllneknhgv	lhtsvllte	mcerspdlma	hfrksqlvp	qlvrilkni	msgyspehdv
241	sgisdplqv	riilrlrilg	rndddseam	ndilaqvatn	tetsknvgn	ilyetvltim
301	dikseshlv	lainilgrfl	lnndkniryv	altsllktvq	tdhnavqrhr	stivdckdl
361	dvsikrrame	lsfalvngnn	irgmmkelly	fldscepfe	adcasgifla	aekyapskrw
421	hidtimrvlt	tagsyvrrda	vpnlilqitn	svemhaytvq	rlykailgdy	sqqplqvaa
481	wcigeqgdll	vsgqceeeep	iqvtedevld	ilesvliisnm	stsvtrgyal	taimklstrf
541	tctvnrikv	vsiygssidv	elqqraveyn	alfkkydhmr	sallermvpm	ekvtngpte
601	ivqtngtetp	apletkppps	gpqptsqand	lldllgndi	tpvptapts	<b>kpssaggell</b>
661	dllgdinltg	apaaapapas	vpqisqppfl	ldglssqplf	ndiaagipsi	taysknglki
721	efffersntn	psvtvitiqa	snsteldmtd	fvfqaavpkt	fqlqllspss	sivpafntgt
781	itqvikvlnp	qkqqlrmrik	ltnhkggsam	qdlavevnnfp	pqswq	

**Immunogen:** This affinity purified antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding aa 646-659 of Human AP1G1.

#### General References:

Nogi, T., Shiba, Y., Kawasaki, M., Shiba, T., Matsugaki, N., Igarashi, N., Suzuki, M., Kato, R., Takatsu, H., Nakayama, K. and Wakatsuki, S. (2002) Structural basis for the accessory protein recruitment by the gamma-adaptin ear domain. *Nat. Struct. Biol.* **9** (7), 527-531.

Shiba, Y., Takatsu, H., Shin, H.W. and Nakayama, K. (2002) Gamma-adaptin interacts directly with Rabaptin-5 through its ear domain. *J. Biochem.* **131** (3), 327-336.

Takatsu, H., Sakurai, M., Shin, H.W., Murakami, K. and Nakayama, K. (1998) Identification and characterization of novel clathrin adaptor-related proteins. *J. Biol. Chem.* **273** (38), 24693-24700.

Peyrard, M., Parveneh, S., Lagercrantz, S., Ekman, M., Fransson, I., Sahlen, S. and Dumanski, J.P. (1998) Cloning, expression pattern, and chromosomal assignment to 16q23 of the human gamma-adaptin gene (ADTG). *Genomics* **50** (2), 275-280.

#### Related Products:

#605-703-125	Peroxidase Conjugated Affinity Purified Anti-GOAT IgG (H&L) (DONKEY) MX Ch GP Ham Hs Ms Rb & Rt Serum Proteins
#605-732-125	IRDye800 Conjugated Affinity Purified Anti-GOAT IgG (H&L) (DONKEY) MX Ch GP Ham Hs Ms Rb & Rt Serum Proteins
#MB-070	Blocking Buffer for Fluorescent Western Blotting
#KIA-004	<b>MaxTag</b> <sup>TM</sup> Anti-GOAT IgG Kit for Immunoblotting

**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.