

Certificate of Analysis

Product: Affinity Purified Anti-Human HAUSP [Rabbit]

Code: 600-401-482

Lot # 19460

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 1.02 mg/ml (by UV absorbance at 280 nm)

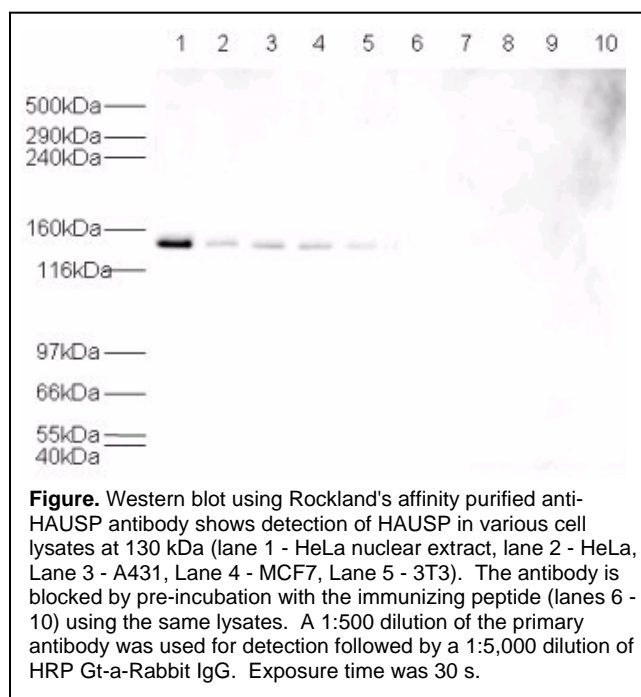
Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

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: HAUSP (also known as deubiquitinating enzyme 7, herpes virus associated ubiquitin specific protease, TEF1, ubiquitin carboxyl terminal hydrolase 7, ubiquitin specific protease 7, ubiquitin thiolesterase 7, and USP7) is a novel p53 interacting protein. HAUSP was identified by mass spectrometry of affinity purified p53 associated factors by Li *et al.* HAUSP strongly stabilizes p53, even in the presence of excess MDM2, and also induces p53-dependent cell growth repression and apoptosis. HAUSP has an intrinsic enzymatic activity that specifically deubiquitinates p53 both *in vivo* and *in vitro*. Expression of a catalytically inactive point mutation of HAUSP in cells increased the levels of p53 ubiquitination and also destabilized p53. Li *et al* concluded that their findings revealed an important mechanism by which p53 can be stabilized by direct de-ubiquitination and also implied that HAUSP may function as a tumor suppressor *in vivo* through the stabilization of p53.



Recommended Dilutions:

ELISA	1:15,000 - 1:60,000
WESTERN BLOT	1:500 - 1:2,000
IF MICROSCOPY	User Optimized
OTHER APPLICATIONS	User Optimized

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 130 kDa in size corresponding to HAUSP protein by western blotting in the appropriate cell lysate or extract.

Purity and Specificity: This affinity purified antibody is directed against human HAUSP protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with HAUSP protein from human, rat, mouse, chimpanzee, bovine and dog based on 100% homology with the immunizing sequence. Expect partial reactivity with HAUSP from chicken (92%, 11/12) and zebrafish (83%, 10/12) sources based on partial sequence homology. Reactivity against homologues from other sources is not known.

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids near the amino terminus of human HAUSP protein.

Relevant Links: NCBI [NP_003461](#) Swiss-Prot [Q93009](#)

General References:

Sheng,Y., Saridakis,V., Sarkari,F., Duan,S., Wu,T., Arrowsmith,C.H. and Frappier,L. (2006) Molecular recognition of p53 and MDM2 by USP7/HAUSP. *Nat. Struct. Mol. Biol.* **13** (3), 285-291.

Boutell,C., Canning,M., Orr,A. and Everett,R.D. (2005) Reciprocal activities between herpes simplex virus type 1 regulatory protein ICPO, a ubiquitin E3 ligase, and ubiquitin-specific protease USP7. *J. Virol.* **79** (19), 12342-12354.

Yoo,K.J., Lee,H.J., Lee,H., Lee,K.Y., Lee,S.H., Chung,H.M. and Baek,K.H. (2005) Expression and functional analyses of mHAUSP regulating apoptosis of cervical adenocarcinoma cells. *Int. J. Oncol.* **27** (1), 97-104.

Li,M., Brooks,C.L., Kon,N. and Gu,W. (2004) A dynamic role of HAUSP in the p53-Mdm2 pathway. *Mol. Cell* **13** (6), 879-886.

Li,M., Chen,D., Shiloh,A., Luo,J., Nikolaev,A.Y., Qin,J. and Gu,W. (2002) Deubiquitination of p53 by HAUSP is an important pathway for p53 stabilization. *Nature* **416** (6881), 648-653.

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
#W09-000-364	HeLa Whole Cell Lysate in SDS-PAGE Sample Buffer
#W09-000-365	293 Whole Cell Lysate in SDS-PAGE Sample Buffer
#B501-0500	500 g BLOTTO
#BSA-30	500 ml 30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer)
#B304	10 ml NORMAL GOAT SERUM (NGS)
#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.