

# Product datasheet

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# ARG42022 anti-KEAP1 antibody

Package: 50 μg Store at: -20°C

# **Summary**

Product Description Goat Polyclonal antibody recognizes KEAP1

Tested Reactivity Hu, Ms

Predict Reactivity Cow, Rat, Dog, Pig

Tested Application ICC/IF, IHC-P, WB

Host Goat

**Clonality** Polyclonal

Isotype IgG

Target Name KEAP1
Species Human

Immunogen Synthetic peptide around the internal region of Human KEAP1. (NP\_036421.2) (C-EVTPSQHGNRTFS)

Conjugation Un-conjugated

Alternate Names KLHL19; Cytosolic inhibitor of Nrf2; INrf2; Kelch-like protein 19; Kelch-like ECH-associated protein 1

# **Application Instructions**

Application table	Application	Dilution
	ICC/IF	5 μg/ml
	IHC-P	3 - 5 μg/ml
	WB	0.2 - 0.6 μg/ml
Application Note	IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0).  WB: Recommend incubate at RT for 1h.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	NIH/3T3	
Observed Size	~ 75 kDa	

# **Properties**

Form Liquid

Purification Affinity purified

Buffer Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 0.5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol KEAP1

Gene Full Name kelch-like ECH-associated protein 1

Background This gene encodes a protein containing KELCH-1 like domains, as well as a BTB/POZ domain. Kelch-like

ECH-associated protein 1 interacts with NF-E2-related factor 2 in a redox-sensitive manner and the dissociation of the proteins in the cytoplasm is followed by transportation of NF-E2-related factor 2 to

the nucleus. This interaction results in the expression of the catalytic subunit of gamma-

 ${\it glutamylcysteine synthetase.}\ {\it Two alternatively spliced transcript variants encoding the same isoform}$ 

have been found for this gene. [provided by RefSeq, Jul 2008]

Function Acts as a substrate adapter protein for the E3 ubiquitin ligase complex formed by CUL3 and RBX1 and

targets NFE2L2/NRF2 for ubiquitination and degradation by the proteasome, thus resulting in the suppression of its transcriptional activity and the repression of antioxidant response element-mediated detoxifying enzyme gene expression. Retains NFE2L2/NRF2 and may also retain BPTF in the cytosol.

Targets PGAM5 for ubiquitination and degradation by the proteasome. [UniProt]

Highlight Related products:

KEAP1 antibodies; KEAP1 Duos / Panels; Anti-Goat IgG secondary antibodies;

Related news:

Keap1-Nrf2-ARE antibody panel is launched

Calculated Mw 70 kDa

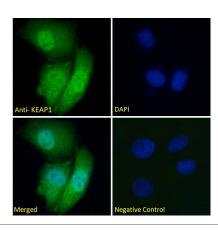
PTM Ubiquitinated by the E3 ubiquitin ligase complex formed by CUL3 and RBX1 and is subject to

proteasomal-independent degradation. Quinone-induced oxidative stress, but not sulforaphane, increases its ubiquitination. Ubiquitination and subsequent degradation is most pronounced following prolonged exposure of cells to oxidative stress, particularly in glutathione-deficient cells that are highly

susceptible to oxidative stress. [UniProt]

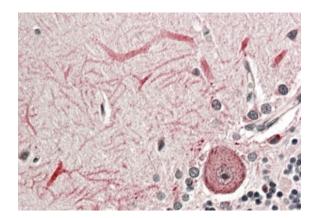
Cellular Localization Cytoplasm. Nucleus. Note=Shuttles between cytoplasm and nucleus. [UniProt]

#### **Images**



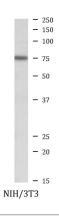
#### ARG42022 anti-KEAP1 antibody ICC/IF image

Immunofluorescence: HeLa cells fixed with Paraformaldehyde and permeabilized with 0.15% Triton. Cells were stained with ARG42022 anti-KEAP1 antibody (green) at 5  $\mu$ g/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized Goat IgG at 5  $\mu$ g/ml dilution.



# ARG42022 anti-KEAP1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human cerebellum tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG42022 anti-KEAP1 antibody at 3.8  $\mu$ g/ml dilution.



# ARG42022 anti-KEAP1 antibody WB image

Western blot: 35  $\mu g$  of NIH/3T3 cell lysate (in RIPA buffer) stained with ARG42022 anti-KEAP1 antibody at 0.2  $\mu g/ml$  dilution and incubated at RT for 1 hour.