

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	lgG
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-glutamylcysteine synthetase. 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: <u>KEAP1 antibodies; KEAP1 Duos / Panels; Anti-Goat IgG secondary antibodies;</u> Related news: <u>Keap1-Nrf2-ARE antibody panel is launched</u>
Calculated Mw	70 kDa
РТМ	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 μ g/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized Goat IgG at 5 μ 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 µg/ml dilution.

- 250 - 150 - 100 - 75 - 50 - 37 - 25 - 20 - 15 NIH/3T3

ARG42022 anti-KEAP1 antibody WB image

Western blot: 35 μg 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.