

Rabbit KEAP1 Polyclonal Antibody | anti-KEAP1 antibody

KEAP1 Antibody

CATALOG # AAA170589	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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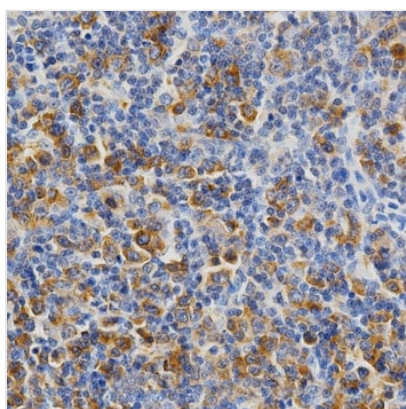
PRODUCT SYNONYMS

KEAP1; Polyclonal Antibody; KEAP1 Antibody; INrf2; KIAA0132; KLHL19; MGC10630; MGC1114; MGC20887; MGC4407; MGC9454; anti-KEAP1 antibody

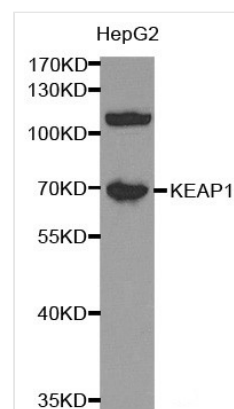
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Antigen affinity purification
Concentration	1mg/mL (varies by lot)
Sequence Length	624
Applicable Applications for anti-KEAP1 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Recombinant protein of human KEAP1
Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Preparation and Storage	Store at -20 degree C (regular) and -80 degree C (long term). Avoid freeze / thaw cycles.

IMAGES


IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded rat spleen using KEAP1 antibody at dilution of 1:200 (x400 lens)


WB (Western Blot)

Western blot analysis of extracts of HepG2 cell lines, using KEAP1 antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-KEAP1 antibody	The nuclear factor-like 2 (NRF2) transcriptional activator binds antioxidant response elements (ARE) of target gene promoter regions to regulate expression of oxidative stress response genes. Under basal conditions, the NRF2 inhibitor INrf2 (also called KEAP1) binds and retains NRF2 in the cytoplasm where it can be targeted for ubiquitin-mediated degradation (1). Small amounts of constitutive nuclear NRF2 maintains cellular homeostasis through regulation of basal expression of antioxidant response genes. Following oxidative or electrophilic stress, KEAP1 releases NRF2, thereby allowing the activator to translocate to the nucleus and bind to ARE-containing genes (2). The coordinated action of NRF2 and other transcription factors mediates the response to oxidative stress (3). Altered expression of NRF2 is associated with chronic obstructive pulmonary disease (COPD) (4). NRF2 activity in lung cancer cell lines directly correlates with cell proliferation rates, and inhibition of NRF2 expression by siRNA enhances anti-cancer drug-induced apoptosis (5). The NRF2 repressor KEAP1 contains an amino terminal BTB/POZ domain and a carboxyl terminal KELCH domain (6, 7). The KELCH domain is required for interacting with NRF2 and the BTB/POZ domain functions in binding Cul3 E3 ubiquitin ligase (8-10). Under normal conditions, the complex leads to the cytoplasmic sequestration and ubiquitin-mediated proteasomal degradation of NRF2. Electrophilic modification of KEAP1 leads to disassociation of the NRF2/KEAP1 complex. KEAP1 also targets the down regulation of NF-kappaB activity by targeting IKKbeta degradation (11).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	45269145
NCBI GeneID	9817
NCBI Accession #	NP_987096.1
NCBI GenBank Nucleotide #	NM_203500.1
Molecular Weight	69,666 Da
NCBI Official Full Name	kelch-like ECH-associated protein 1
NCBI Official Synonym Full Names	kelch-like ECH-associated protein 1
NCBI Official Symbol	KEAP1
NCBI Official Synonym Symbols	INrf2; KLHL19
NCBI Protein Information	kelch-like ECH-associated protein 1; cytosolic inhibitor of Nrf2; kelch-like family member 19; kelch-like protein 19
UniProt Protein Name	Kelch-like ECH-associated protein 1
UniProt Gene Name	KEAP1
UniProt Synonym Gene Names	INRF2; KIAA0132; KLHL19; INrf2
UniProt Entry Name	KEAP1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.