

KEAP1 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS15665**Specification****KEAP1 Antibody (C-Terminus) - Product Information**

Application	IHC, IF, WB
Primary Accession	Q14145
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	70kDa KDa

KEAP1 Antibody (C-Terminus) - Additional Information**Gene ID** 9817**Other Names**

Kelch-like ECH-associated protein 1, Cytosolic inhibitor of Nrf2, INrf2, Kelch-like protein 19, KEAP1, INRF2, KIAA0132, KLHL19

Target/Specificity

Human KEAP1. At least two isoforms of KEAP1 are known to exist.

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

KEAP1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

KEAP1 Antibody (C-Terminus) - Protein Information**Name** KEAP1 {ECO:0000303|PubMed:14585973, ECO:0000312|HGNC:HGNC:23177}**Function**

Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that regulates the response to oxidative stress by targeting NFE2L2/NRF2 for ubiquitination (PubMed:14585973, PubMed:15379550, PubMed:15572695, PubMed:15983046, PubMed:15601839, PubMed:37339955). KEAP1 acts as a key sensor of oxidative and electrophilic stress: in normal conditions, the BCR(KEAP1) complex mediates ubiquitination and degradation of NFE2L2/NRF2, a transcription factor regulating expression of many cytoprotective genes (PubMed:15601839, PubMed:15601839).

[16006525](http://www.uniprot.org/citations/16006525)). In response to oxidative stress, different electrophile metabolites trigger non-enzymatic covalent modifications of highly reactive cysteine residues in KEAP1, leading to inactivate the ubiquitin ligase activity of the BCR(KEAP1) complex, promoting NFE2L2/NRF2 nuclear accumulation and expression of phase II detoxifying enzymes (PubMed:[19489739](http://www.uniprot.org/citations/19489739), PubMed:[16006525](http://www.uniprot.org/citations/16006525), PubMed:[17127771](http://www.uniprot.org/citations/17127771), PubMed:[18251510](http://www.uniprot.org/citations/18251510), PubMed:[29590092](http://www.uniprot.org/citations/29590092)). In response to selective autophagy, KEAP1 is sequestered in inclusion bodies following its interaction with SQSTM1/p62, leading to inactivation of the BCR(KEAP1) complex and activation of NFE2L2/NRF2 (PubMed:[20452972](http://www.uniprot.org/citations/20452972)). The BCR(KEAP1) complex also mediates ubiquitination of SQSTM1/p62, increasing SQSTM1/p62 sequestering activity and degradation (PubMed:[28380357](http://www.uniprot.org/citations/28380357)). The BCR(KEAP1) complex also targets BPTF and PGAM5 for ubiquitination and degradation by the proteasome (PubMed:[15379550](http://www.uniprot.org/citations/15379550), PubMed:[17046835](http://www.uniprot.org/citations/17046835)).

Cellular Location

Cytoplasm. Nucleus. Note=Mainly cytoplasmic (PubMed:15601839). In response to selective autophagy, relocates to inclusion bodies following interaction with SQSTM1/p62 (PubMed:20452972).

Tissue Location

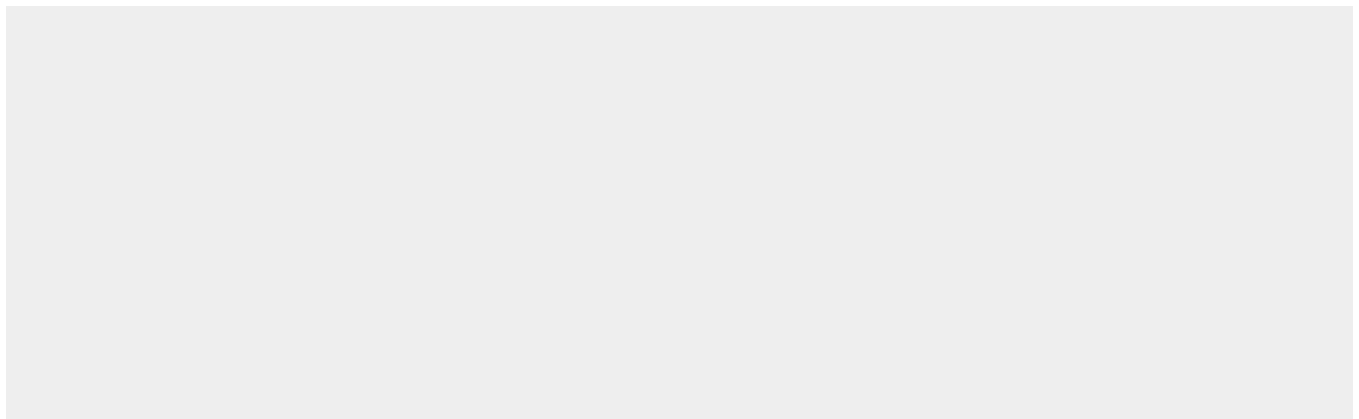
Broadly expressed, with highest levels in skeletal muscle.

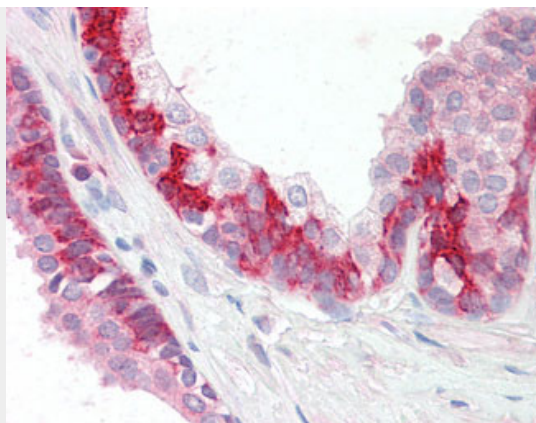
KEAP1 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

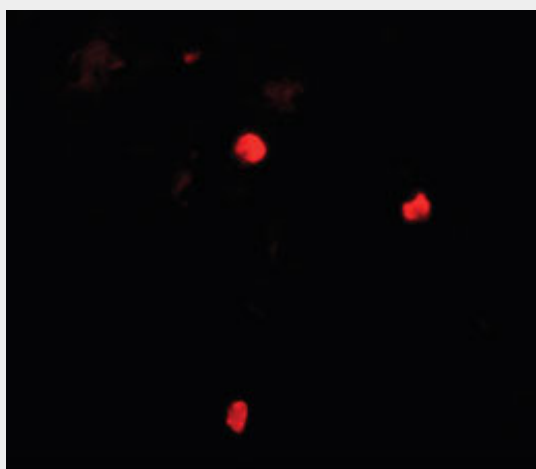
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KEAP1 Antibody (C-Terminus) - Images

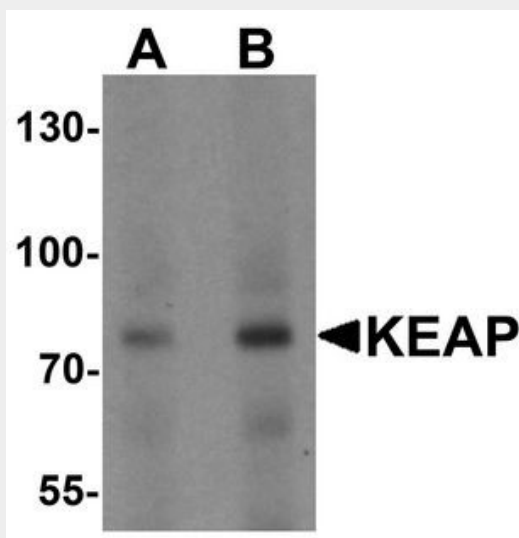




Anti-KEAP1 antibody IHC staining of human prostate.



Immunofluorescence of KEAP1 in human lung tissue with KEAP1 antibody at 20 ug/ml.



Western blot analysis of KEAP1 in human lung tissue lysate with KEAP1 antibody at (A) 1 and (B)...

KEAP1 Antibody (C-Terminus) - Background

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.

KEAP1 Antibody (C-Terminus) - References

Dhakshinamoorthy S.,et al.Submitted (MAR-2001) to the EMBL/GenBank/DDBJ databases.

Nagase T.,et al.DNA Res. 2:167-174(1995).

Ohara O.,et al.Submitted (DEC-2008) to the EMBL/GenBank/DDBJ databases.

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Grimwood J.,et al.Nature 428:529-535(2004).