

**KEAP1 Antibody (N-Terminus)**  
**Goat Polyclonal Antibody**  
**Catalog # ALS15404****Specification**

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**KEAP1 Antibody (N-Terminus) - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">Q14145</a>
Reactivity	<b>Human, Monkey, Pig, Horse, Bovine, Dog</b>
Host	<b>Goat</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>70kDa KDa</b>

**KEAP1 Antibody (N-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. Reported variants represent identical protein: NP\_036421.2, NP\_987096.1

**Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

**Precautions**

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

**KEAP1 Antibody (N-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: <a href="http://www.uniprot.org/citations/14585973" target="\_blank">14585973</a>, PubMed: <a href="http://www.uniprot.org/citations/15379550" target="\_blank">15379550</a>, PubMed: <a href="http://www.uniprot.org/citations/15572695" target="\_blank">15572695</a>, PubMed: <a href="http://www.uniprot.org/citations/15601839" target="\_blank">15601839</a>, PubMed: <a href="http://www.uniprot.org/citations/15983046" target="\_blank">15983046</a>, PubMed: <a href="http://www.uniprot.org/citations/37339955" target="\_blank">37339955</a>). 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: <a href="http://www.uniprot.org/citations/15601839" target="\_blank">15601839</a>, PubMed: <a href="http://www.uniprot.org/citations/15601839" target="\_blank">15601839</a>, PubMed: <a href="http://www.uniprot.org/citations/15601839" target="\_blank">15601839</a>).

<http://www.uniprot.org/citations/16006525> target="\_blank">16006525</a>). 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:<a href="http://www.uniprot.org/citations/16006525" target="\_blank">16006525</a>, PubMed:<a href="http://www.uniprot.org/citations/17127771" target="\_blank">17127771</a>, PubMed:<a href="http://www.uniprot.org/citations/18251510" target="\_blank">18251510</a>, PubMed:<a href="http://www.uniprot.org/citations/19489739" target="\_blank">19489739</a>, PubMed:<a href="http://www.uniprot.org/citations/29590092" target="\_blank">29590092</a>). 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:<a href="http://www.uniprot.org/citations/20452972" target="\_blank">20452972</a>). The BCR(KEAP1) complex also mediates ubiquitination of SQSTM1/p62, increasing SQSTM1/p62 sequestering activity and degradation (PubMed:<a href="http://www.uniprot.org/citations/28380357" target="\_blank">28380357</a>). The BCR(KEAP1) complex also targets BPTF and PGAM5 for ubiquitination and degradation by the proteasome (PubMed:<a href="http://www.uniprot.org/citations/15379550" target="\_blank">15379550</a>, PubMed:<a href="http://www.uniprot.org/citations/17046835" target="\_blank">17046835</a>).

#### Cellular Location

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

#### Tissue Location

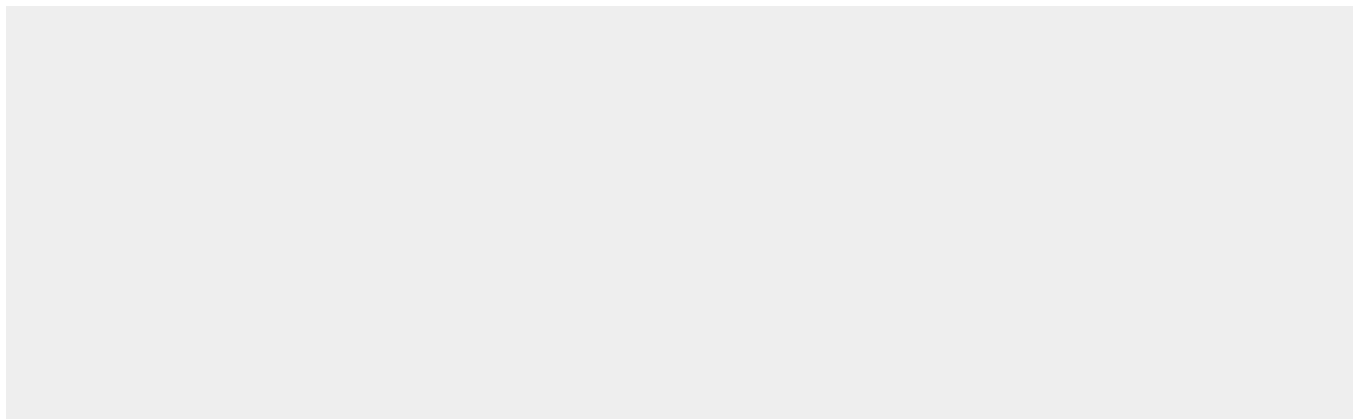
Broadly expressed, with highest levels in skeletal muscle.

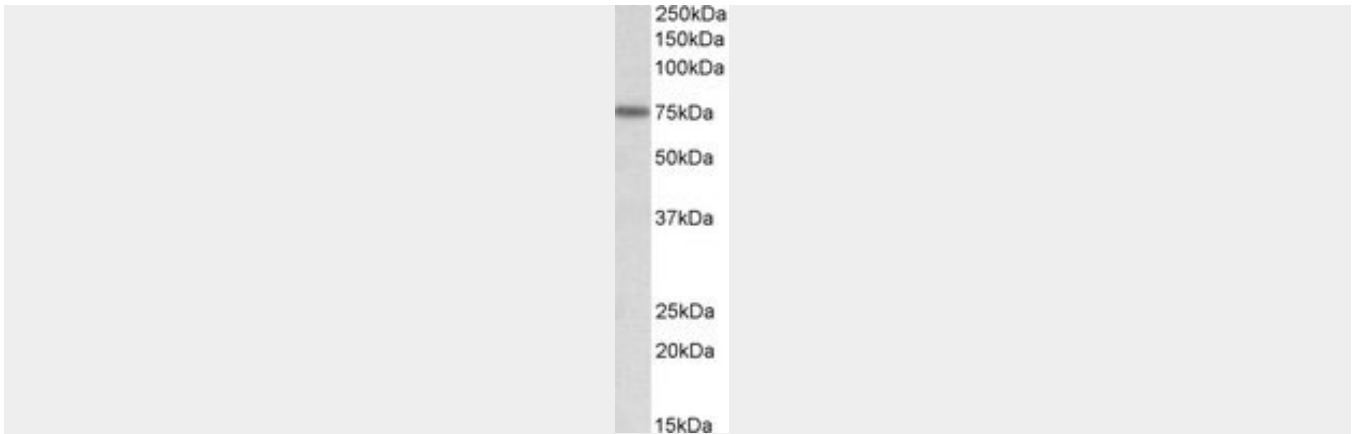
#### KEAP1 Antibody (N-Terminus) - Protocols

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

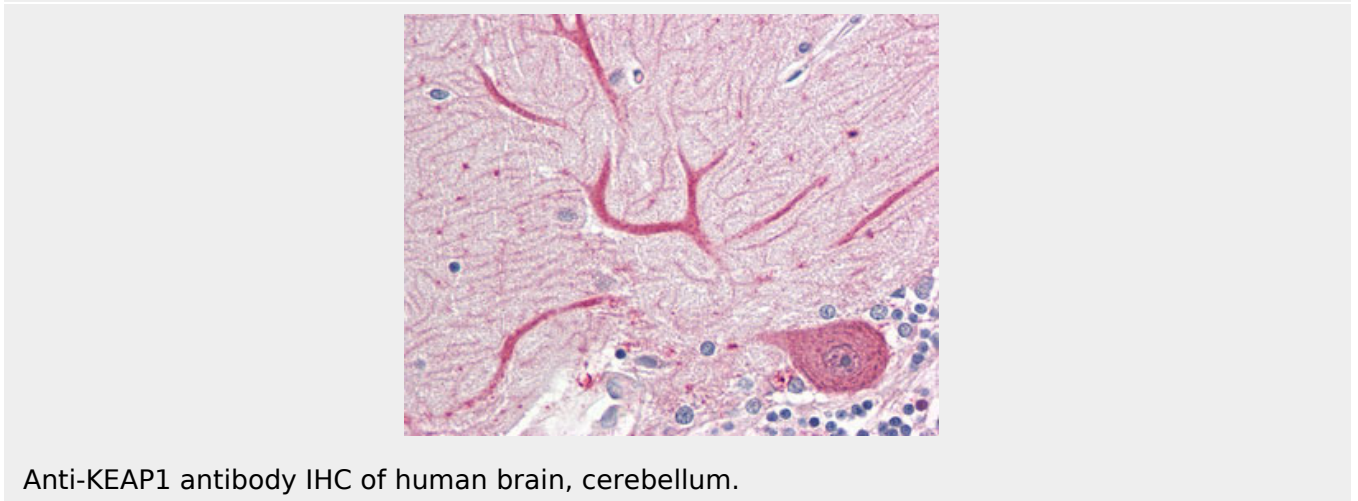
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### KEAP1 Antibody (N-Terminus) - Images





KEAP1 antibody (0.2 ug/ml) staining of NIH3T3 lysate (35 ug protein/ml in RIPA buffer).



Anti-KEAP1 antibody IHC of human brain, cerebellum.

### **KEAP1 Antibody (N-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 (N-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).