

[15601839](http://www.uniprot.org/citations/15601839), PubMed: [15983046](http://www.uniprot.org/citations/15983046), PubMed: [37339955](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/15601839), PubMed: [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: [16006525](http://www.uniprot.org/citations/16006525), PubMed: [17127771](http://www.uniprot.org/citations/17127771), PubMed: [18251510](http://www.uniprot.org/citations/18251510), PubMed: [19489739](http://www.uniprot.org/citations/19489739), 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, relocalizes to inclusion bodies following interaction with SQSTM1/p62 (PubMed:20452972).

Tissue Location

Broadly expressed, with highest levels in skeletal muscle.

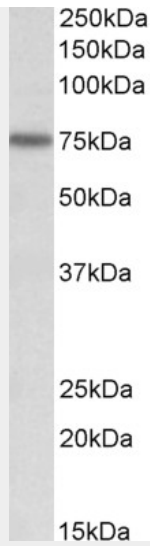
KEAP1 (aa41-53) Antibody (internal region, near N-Term) - Protocols

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

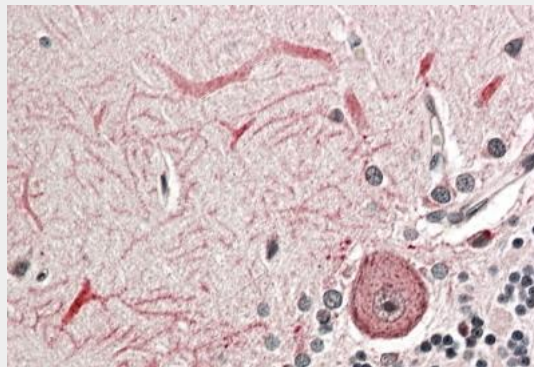
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KEAP1 (aa41-53) Antibody (internal region, near N-Term) - Images

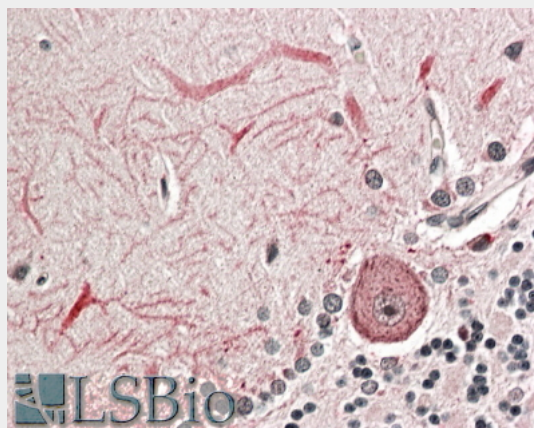




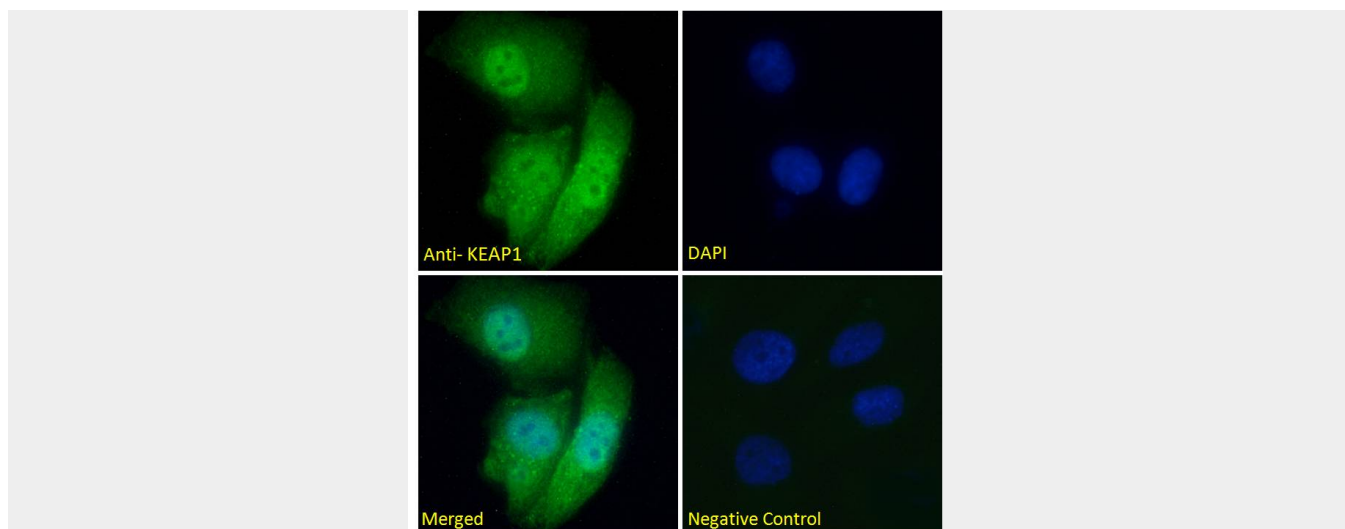
AF3560a (0.2 $\mu\text{g/ml}$) staining of NIH3T3 lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF3560a (3.8 $\mu\text{g/ml}$) staining of paraffin embedded Human Cerebellum. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB10963 (3.8 $\mu\text{g/ml}$) staining of paraffin embedded Human Cerebellum. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB10963 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (5ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing nuclear and cytoplasmic staining. The nuclear stain

KEAP1 (aa41-53) Antibody (internal region, near N-Term) - Background

Reported variants represent identical protein: NP_036421.2, NP_987096.1

KEAP1 (aa41-53) Antibody (internal region, near N-Term) - References

An exceptionally potent inducer of cytoprotective enzymes: elucidation of the structural features that determine inducer potency and reactivity with Keap1. Dinkova-Kostova AT, Talalay P, Sharkey J, Zhang Y, Holtzclaw WD, Wang XJ, David E, Schiavoni KH, Finlayson S, Mierke DF, Honda T. J Biol Chem. 2010 Oct 29;285(44):33747-55. PMID: 20801881