

Specification

Application	IHC, WB
Primary Accession	Q14145
Other Accession	NM_203500 , NP_987096
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Horse, Bovine, Dog
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	70kDa KDa

Gene ID 9817

Alias Symbol

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

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 100 ul of distilled water. Final anti-KEAP1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

KEAP1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

KEAP1 antibody - C-terminal region - 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:15572695)

href="http://www.uniprot.org/citations/15983046" target="_blank">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: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, PubMed:16006525, PubMed:17127771, PubMed:18251510, PubMed: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). The BCR(KEAP1) complex also mediates ubiquitination of SQSTM1/p62, increasing SQSTM1/p62 sequestering activity and degradation (PubMed:28380357). The BCR(KEAP1) complex also targets BPTF and PGAM5 for ubiquitination and degradation by the proteasome (PubMed:15379550, PubMed: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

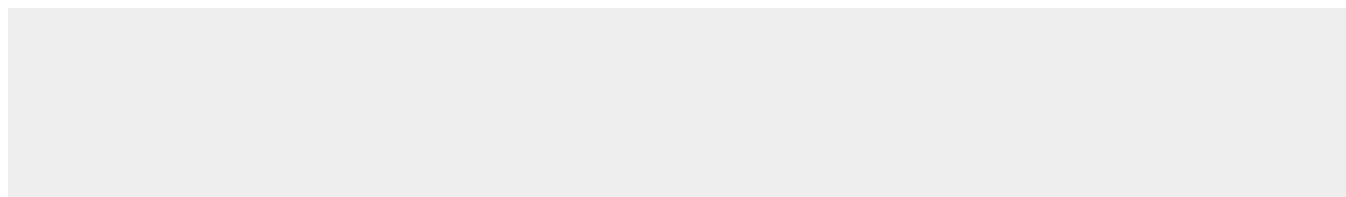
Broadly expressed, with highest levels in skeletal muscle.

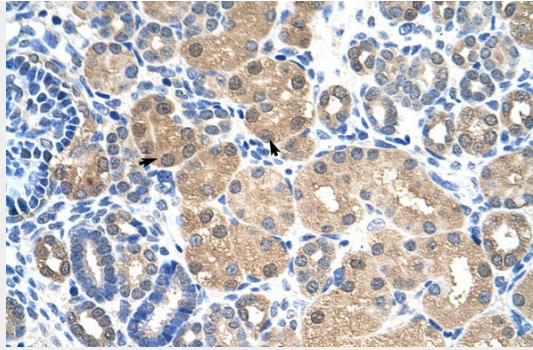
KEAP1 antibody - C-terminal region - Protocols

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

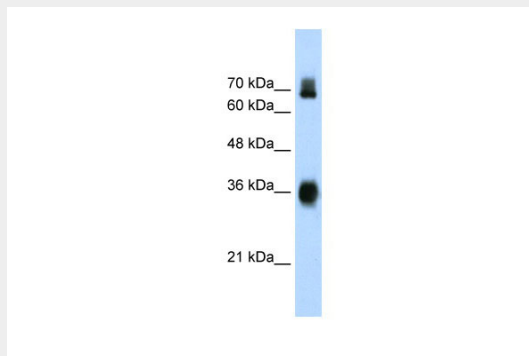
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KEAP1 antibody - C-terminal region - Images





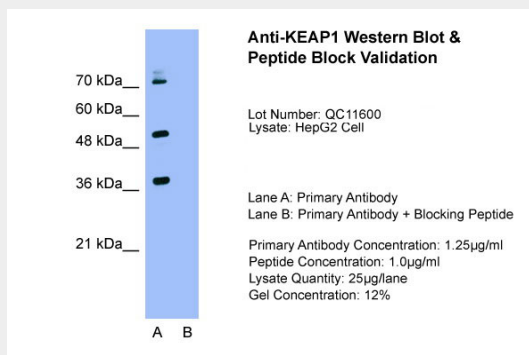
Human kidney



WB Suggested Anti-KEAP1 Antibody Titration: 1.0µg/ml

Positive Control: HepG2 cell lysate

KEAP1 is supported by BioGPS gene expression data to be expressed in HepG2



Host: Rabbit

Target Name:KEAP1

Sample Tissue:HepG2

Lane A: Primary Antibody

Lane B: Primary Antibody + Blocking Peptide

Primary Antibody

Concentration:1.25µg/ml

Peptide Concentration: 1.0µg/ml

Lysate Quantity: 25ug/lane Gel

Concentration: 12%KEAP1 is supported by BioGPS gene expression data to be expressed in HepG2

KEAP1 antibody - C-terminal region - References

Padmanabhan,B., (2006) Mol. Cell 21 (5), 689-700 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.