

KEAP1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10092b

Specification

KEAP1 Antibody (C-term) - Product Information

Application IHC-P, WB,E Primary Accession 014145

Other Accession <u>Q684M4</u>, <u>NP 036421.2</u>, <u>NP 987096.1</u>

Reactivity
Predicted
Pig
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Pig
Rabbit
Rabbit
Rabbit
90lyclonal
Rabbit IgG
422-449

KEAP1 Antibody (C-term) - 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

This KEAP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 422-449 amino acids from the C-terminal region of human KEAP1.

Dilution

IHC-P~~1:50~100 WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

KEAP1 Antibody (C-term) - 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: 15601839, PubMed: 15983046, 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:16006525, PubMed:17127771, PubMed:18251510, PubMed:19489739, 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.

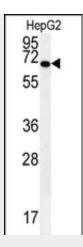
KEAP1 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KEAP1 Antibody (C-term) - Images





KEAP1 Antibody (C-term) (Cat. #AP10092b) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the KEAP1 antibody detected the KEAP1 protein (arrow).



KEAP1 antibody (C-term) (Cat. #AP10092b) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the KEAP1 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.