

Product name:	Keap1 Rabbit Polyclonal Antibody
Cat number:	ABN12977
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from the Internal region of human KEAP1. AA range:411-460
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	70kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a protein containing KELCH-1 like domains, as well as a BTB/POZ domain. Kelch-like ECH-associated protein 1 interacts with NF-E2-related factor 2 in a redox-sensitive manner and the dissociation of the proteins in the cytoplasm is followed by transportation of NF-E2-related factor 2 to the nucleus. This interaction results in the expression of the catalytic subunit of gamma-glutamylcysteine synthetase. Two alternatively spliced transcript variants encoding the same isoform have been found for this gene. [provided by RefSeq, Jul 2008],disease:Defects in KEAP1 may be a cause of breast cancer.,disease:Defects in KEAP1 may be involved in non small cell lung carcinomas (NSCLC) and lung adenocarcinoma.,domain:The Kelch repeats mediate interaction with NF2L2/NRF2, BPTF and PGAM5.,enzyme regulation:Ubiquitination and subsequent degradation of PGAM5 is inhibited by oxidative stress and sulforaphane.,function:Retains NFE2L2/NRF2 in the cytosol. Functions as substrate adapter protein for the E3 ubiquitin ligase complex formed by CUL3 and RBX1. 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. May also retain BPTF in the cytosol. Targets PGAM5 for ubiquitination and degradation by the proteasome.,PTM:Ubiquitinated and subject to proteasomal degradation.,similarity:Contains 1 BACK (BTB/Kelch associated) domain.,similarity:Contains 1 BTB (POZ) domain.,similarity:Contains 6 Kelch repeats.,subcellular location:Shuttles between cytoplasm and nucleus.,subunit:Homodimer. Interacts with the N-terminal regulatory domain of NF2L2/NRF2. Interacts with BPTF and PTMA. Interacts with CUL3. Part of a complex that contains KEAP1, CUL3 and RBX1. Interacts with PGAM5.,tissue specificity:Broadly expressed, with highest levels in skeletal muscle.,