

Rabbit nrf2 Polyclonal Antibody | anti-nrf2 antibody

Phospho-nrf2(Ser40) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327189	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

nrf2; Polyclonal Antibody; Phospho-nrf2(Ser40) Antibody; erythroid derived 2; HEBP1; like 2; NF E2 related factor 2; NF-E2-related factor 2; NF2L2_HUMAN; NFE2 related factor 2; NFE2-related factor 2; Nfe2l2; Nrf 2; NRF2; Nuclear factor (erythroid derived 2) like 2; Nuclear factor; nuclear factor erythroid 2 like 2; Nuclear factor erythroid 2 related factor 2; Nuclear factor erythroid 2-related factor 2; Nuclear factor erythroid derived 2 like 2; anti-nrf2 antibody

PRODUCT SPECIFICATIONS

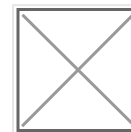
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-nrf2(S40) antibody detects endogenous levels of nrf2 only when phosphorylated at S40
Purity/Purification	Peptide affinity purification
Form/Format	Rabbit igG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	~1mg/ml (varies by lot)
Sequence Length	589
Applicable Applications for anti-nrf2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Phospho-nrf2 around the phosphorylation site of Ser40.
Preparation and Storage	Store at -20°C. Stable for 12 months from date of receipt.

IMAGES



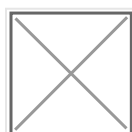
IF (Immunofluorescence)

AAA327189 staining A549 cells(4h of LPS treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AAA327189) and mouse anti-beta tubulin Ab for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary Ab. The nuclear counter stain is DAPI (blue).



IHC (Immunohistochemistry)

AAA327189 at 1/100 staining Human normal tissues adjacent to mammary cancer by IHC-P. The sample was formaldehydefixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of Phospho-nrf2(S40) using HT-29 whole cell lysates

ADDITIONAL INFORMATION

Related Product Information for anti-nrf2 antibody	Function: Transcription activator that binds to antioxidant response (ARE) elements in the promoter regions of target genes. Important for the coordinated up-regulation of genes in response to oxidative stress. May be involved in the transcriptional activation of genes of the beta-globin cluster by mediating enhancer activity of hypersensitive site 2 of the beta-globin locus control region. Subunit Structure: Heterodimer. Forms a ternary complex with PGAM5 and KEAP1. May bind DNA with an unknown protein. Interacts via its leucine-zipper domain with the coiled-coil domain of PMF1. Interacts with EEF1D at heat shock promoter elements (HSE). Interacts (via the bZIP domain) with MAFK; required for binding to antioxidant response (ARE) elements on DNA. Interacts with CHD6; involved in activation of the transcription. Interacts with ESRRB; represses NFE2L2 transcriptional activity (By similarity). Post-translational Modifications: Phosphorylation of Ser-40 by PKC in response to oxidative stress dissociates NFE2L2 from its cytoplasmic inhibitor KEAP1, promoting its translocation into the nucleus. Acetylation at Lys-596 and Lys-599 increases nuclear localization whereas deacetylation by SIRT1 enhances cytoplasmic presence. Ubiquitinated by the KEAP1-CUL3-RBX1 E3 ubiquitin ligase complex and subject to proteasomal degradation. Ubiquitination is inhibited by sulforaphane. Similarity: Acidic activation domain in the N-terminus, and DNA binding domain in the C-terminus. Belongs to the bZIP family. CNC subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	224028257
NCBI GeneID	4780
NCBI Accession #	NP_001138884.1
NCBI GenBank Nucleotide #	NM_001145412.3
UniProt Accession #	Q16236; Q53RW6; Q59HH2; Q96F71; B2RBU2; B4E338; E9PGJ7
Molecular Weight	90 kDa
NCBI Official Full Name	nuclear factor erythroid 2-related factor 2 isoform 2
NCBI Official Synonym Full Names	nuclear factor, erythroid 2 like 2
NCBI Official Symbol	NFE2L2
NCBI Official Synonym Symbols	NRF2; HEBP1; IMDDHH
NCBI Protein Information	nuclear factor erythroid 2-related factor 2
UniProt Protein Name	Nuclear factor erythroid 2-related factor 2
UniProt Gene Name	NFE2L2
UniProt Synonym Gene Names	NRF2; NF-E2-related factor 2; NFE2-related factor 2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.