

## Nrf2 (Acetyl Lys599) Polyclonal Antibody

Catalog No: YK0063

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Nrf2

**Fields:** >>Protein processing in endoplasmic reticulum;>>Parkinson

disease;>>Pathways in cancer;>>Chemical carcinogenesis - reactive oxygen species;>>Hepatocellular carcinoma;>>Lipid and atherosclerosis;>>Fluid shear

stress and atherosclerosis

Gene Name: NFE2L2

**Protein Name:** Nuclear factor erythroid 2-related factor 2

Q16236

Q60795

Human Gene Id: 4780

**Human Swiss Prot** 

No:

Mouse Gene Id: 18024

**Mouse Swiss Prot** 

No:

Rat Gene ld: 83619

Rat Swiss Prot No: 054968

Immunogen: Synthesized acetyl-peptide derived from the C-terminal region of human Nrf2

around the acetylation site of K599.

**Specificity:** Acetyl-Nrf2 (K599) Polyclonal Antibody detects endogenous levels of Nrf2

protein only when acetylation at K599.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source :** Polyclonal, Rabbit, IgG



**Dilution:** WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:10000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 75-100kD

Background: This gene encodes a transcription factor which is a member of a small family of

basic leucine zipper (bZIP) proteins. The encoded transcription factor regulates genes which contain antioxidant response elements (ARE) in their promoters; many of these genes encode proteins involved in response to injury and inflammation which includes the production of free radicals. Multiple transcript variants encoding different isoforms have been characterized for this gene.

[provided by RefSeq, Sep 2015],

**Function:** domain: Acidic activation domain in the N-terminus, and DNA binding domain in

the C-terminus., 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., PTM: Phosphorylation of Ser-40 by PKC in response to oxidative

translocation into the nucleus., similarity: Belongs to the bZIP

family., similarity: Belongs to the bZIP family. CNC subfamily., similarity: Contains 1

stress dissociates NFE2L2 from its cytoplasmic inhibitor KEAP1, promoting its

bZIP domain., subcellular location: Cytosolic under unstressed conditions,

translocates into the nucleus upon induction by electr

Subcellular

Cytoplasm, cytosol . Nucleus . Cytosolic under unstressed conditions:

ubiquitinated and degraded by the BCR(KEAP1) E3 ubiquitin ligase com

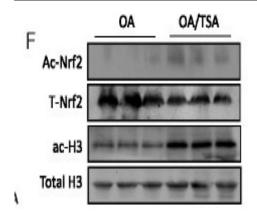
ubiquitinated and degraded by the BCR(KEAP1) E3 ubiquitin ligase complex (PubMed:15601839, PubMed:21196497). Translocates into the nucleus upon induction by electrophilic agents that inactivate the BCR(KEAP1) E3 ubiquitin

ligase complex (PubMed:21196497)...

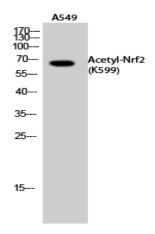
**Expression:** Widely expressed. Highest expression in adult muscle, kidney, lung, liver and in

fetal muscle.

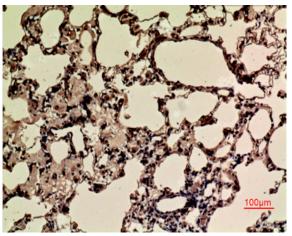
## **Products Images**



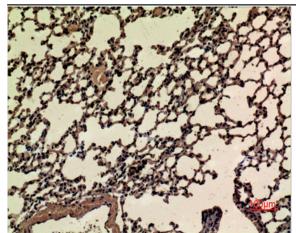
Cai, Dawei, et al. "Histone deacetylase inhibition activates Nrf2 and protects against osteoarthritis." Arthritis research & therapy 17.1 (2015): 269.



Western Blot analysis of A549 cells using Acetyl-Nrf2 (K599) Polyclonal Antibody. Antibody was diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded rat-lung, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded mouselung, antibody was diluted at 1:100