




Rabbit Anti-phospho-Nrf2 (Ser40) antibody

SL2013R

Product Name:	phospho-Nrf2 (Ser40)
Chinese Name:	磷酸化核因子2相关因子2(Ser40)抗体
Alias:	Nrf2 (phospho S40); p-Nrf2 (phospho S40); Nuclear factor-E2 related factor2; HEBP1; NF E2 related factor 2; NFE2 related factor 2; NFE2L2; Nrf 2; Nuclear factor erythroid 2 related factor 2; Nuclear factor erythroid derived 2 like 2; NF2L2_HUMAN.
文献引用 	<p>Specific References(20) SL2013R has been referenced in 20 publications.</p> <p>[IF=3.36]Li, Ying-Na, et al. "Saponins from Aralia taibaiensis Attenuate D-Galactose-Induced Aging in Rats by Activating FOXO3a and Nrf2 Pathways." <i>Oxidative medicine and cellular longevity</i> 2014 (2014).IHC-P; PubMed:24669284</p> <p>[IF=7.19]Mo, Chunfen, et al. "The Crosstalk between Nrf2 and AMPK Pathways Is Important for the Anti-inflammatory Effect of Berberine in LPS-Stimulated Macrophages and Endotoxin-Shocked Mice." <i>Antioxidants & redox signaling</i>?ja (2013). PubMed:23875776</p> <p>[IF=5.27]Lee, Bao-Hong, et al. "Dimerumic acid attenuates receptor for advanced glycation endproduct (RAGE) signal to inhibit inflammation and diabetes mediated by Nrf2 activation and promoted methylglyoxal metabolism into D-lactate acid" <i>Free Radical Biology and Medicine</i>WB;Human, Mouse. PubMed:23434766</p> <p>[IF=5.27]Lee, Bao-Hong, et al. "Ankaflavin: A natural novel PPAR?? agonist up-regulated Nrf2 to attenuate methylglyoxal (MG)-induced diabetes< i> in vivo." <i>Free Radical Biology and Medicine</i> (2012).yWB;Rat.</p>

[PubMed:23022408](#)

[IF=3.01] Bao-Hong, L. et al. "Graptopetalum paraguayense and resveratrol ameliorates 3 carboxymethyllysine (CML)-induced pancreas dysfunction and 4 hyperglycemia." Food and Chemical Toxicology. (2013). **WB;Mouse**.

[PubMed:24036142](#)

[IF=3.01] Lee, Bao-Hong, et al. "< i> Graptopetalum paraguayense and resveratrol ameliorates carboxymethyllysine (CML)-induced pancreas dysfunction and hyperglycemia." Food and Chemical Toxicology 62 (2013): 492-498. **WB;Mouse**.

[PubMed:24036142](#)

[IF=2.91] Hsu, Wei-Hsuan, et al. "Monascin and AITC attenuate methylglyoxal-induced PPAR?? phosphorylation and degradation through inhibition of the oxidative stress/PKC pathway depending on Nrf2 activation." Journal of agricultural and food chemistry (2013).. **Mouse**.

[PubMed:23731245](#)

[IF=2.74] Cheng, An-Sheng, Yu-Hsiang Cheng, and Tsu-Liang Chang. "Resveratrol protects RINm5F pancreatic cells from methylglyoxal-induced apoptosis." Journal of Functional Foods (2013). **WB;Rat**.

[PubMed: not posted yet](#)

[IF=3.37] Kakehashi A, Kato A, Ishii N, Wei M, Morimura K, et al. (2014) Valerian Inhibits Rat Hepatocarcinogenesis by Activating GABA(A) Receptor-Mediated Signaling. PLoS ONE 9(11): e113610. **IHC-P;Rat**.

[PubMed:25419570](#)

[IF=2.87] Kaneko, Yoko S., et al. "Aripiprazole increases NAD (P) H–quinone oxidoreductase-1 and heme oxygenase-1 in PC12 cells." Journal of Neural Transmission: 1-16. **WB;Rat**.

[PubMed:25504008](#)

[IF=2.10] Chang, Wen-Chang, et al. "Scopoletin Protects against Methylglyoxal-Induced Hyperglycemia and Insulin Resistance Mediated by Suppression of Advanced Glycation Endproducts (AGEs) Generation and Anti-Glycation." Molecules 20.2 (2015): 2786-2801. **IHC-P;Rat**.

[PubMed:25671364](#)

[IF=4.48] Cárdeno, Ana, et al. "Squalene targets pro-and anti-inflammatory mediators

and pathways to modulate over-activation of neutrophils, monocytes and macrophages." Journal of Functional Foods 14 (2015): 779-790.**WB;Human.**

[PubMed:not posted yet](#)

[IF=5.74]Santofimia-Castaño, Patricia, et al. "Melatonin induces the expression of Nrf2-regulated antioxidant enzymes via PKC and Ca²⁺ influx activation in mouse pancreatic acinar cells." Free Radical Biology and Medicine (2015).**Rat.**

[PubMed:26163001](#)

[IF=3.03]Allard, Joanne S., et al. "Prolonged metformin treatment leads to reduced transcription of Nrf2 and neurotrophic factors without cognitive impairment in older C57BL/6J mice." Behavioural Brain Research (2016).**WB;Mouse.**

[PubMed:26698400](#)

[IF=5.03]Yen, Ting-Lin, et al. "Andrographolide stimulates p38 MAPK-Nrf2-HO-1 signaling in primary cerebral endothelial cells for definite protection against ischemic stroke in rats." Translational Research (2016).**WB;Mouse.**

[PubMed:26746802](#)

[IF=3.71]Ko, Su Hyuk, et al. "Crude Preparations of Helicobacter pylori Outer Membrane Vesicles Induce Upregulation of Heme Oxygenase-1 via Activating Akt-Nrf2 and mTOR-IκB Kinase-NF-κB Pathways in Dendritic Cells." Infection and Immunity (2016): IAI-00190.**IF(ICC);Others.**

[PubMed:27185786](#)

[IF=3.73]Ko, Su Hyuk, et al. "Bacteroides fragilis Enterotoxin Upregulates Heme Oxygenase-1 in Intestinal Epithelial Cells via a Mitogen-Activated Protein Kinases-and NF-κB-Dependent Pathway, Leading to Modulation of Apoptosis." Infection and Immunity (2016): IAI-00191.**IF(ICC);Mouse.**

[PubMed:27324483](#)

[IF=3.85]Kim, Mi-Hwi, et al. "EX4 stabilizes and activates Nrf2 via PKCδ, contributing to the prevention of oxidative stress-induced pancreatic beta cell damage." Toxicology and Applied Pharmacology (2016).**WB;Rat.**

[PubMed:27939242](#)

[IF=3.14]Hou, Xiang, et al. "Ameliorative effect of ampelopsin on LPS-induced acute phase response in piglets." Journal of Functional Foods 35 (2017): 489-498.**WB;Pig.**

[PubMed:0](#)

	<p>[IF=4.29] Ghosh, Anindya, et al. "Insulin Inhibits Nrf2 Gene Expression via Heterogeneous Nuclear Ribonucleoprotein F/K in Diabetic Mice." <i>Endocrinology</i> 158.4 (2017): 903-919. WB;Mouse.</p> <p style="text-align: right;">PubMed:28324005</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow,
Applications:	WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 Flow-Cyt=1µg/test IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	68kDa
Cellular localization:	The nucleus/cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human Nrf2 around the phosphorylation site of Ser40:DF(p-S)QR
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>Nuclear factor erythroid 2-related factor 2 (Nrf2) is a transcription factor which regulates the expression of many detoxification and antioxidant enzymes. Nrf2 can potentially play a significant role in adaptive responses to oxidative stress. Nrf2 belongs to the Cap N Collar (CNC-bZIP) subfamily of basic /leucine zipper (bZIP) transcription factors.</p> <p>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.</p> <p>Subunit: 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.</p> <p>Subcellular Location:</p>

Cytoplasm, cytosol. Nucleus. Note=Cytosolic under unstressed conditions, translocates into the nucleus upon induction by electrophilic agents.

Tissue Specificity:

Widely expressed. Highest expression in adult muscle, kidney, lung, liver and in fetal muscle.

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.

Similarity:

Belongs to the bZIP family. CNC subfamily.
Contains 1 bZIP domain.

SWISS:

Q16236

Gene ID:

4780

Database links:

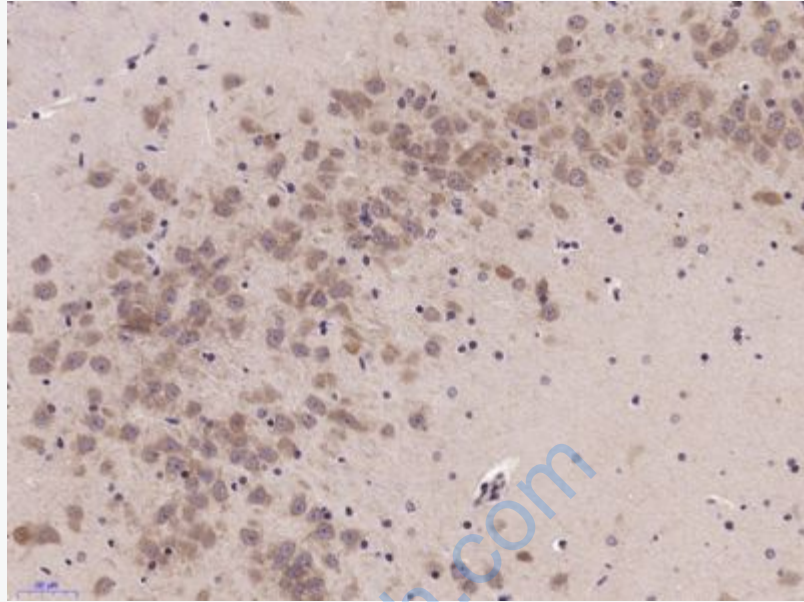
[Entrez Gene: 4780](#)Human

[Omin: 600492](#)Human

[SwissProt: Q16236](#)Human

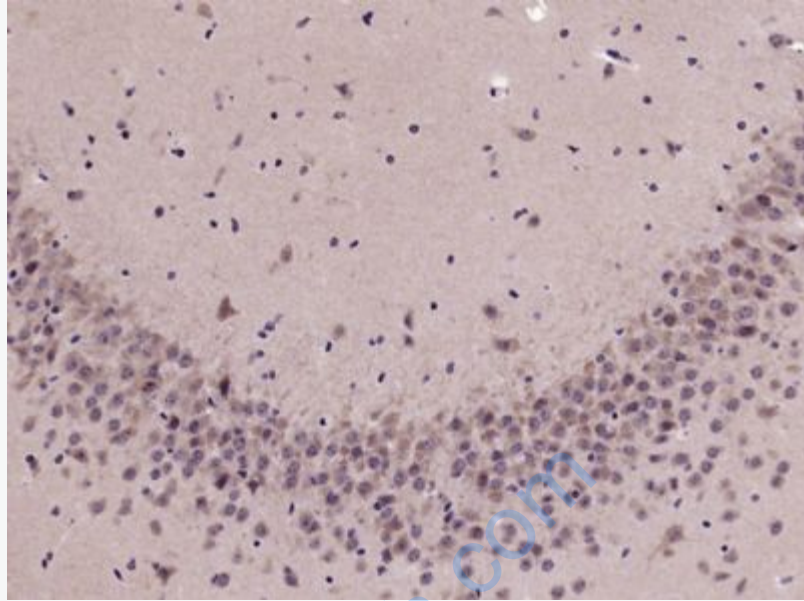
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

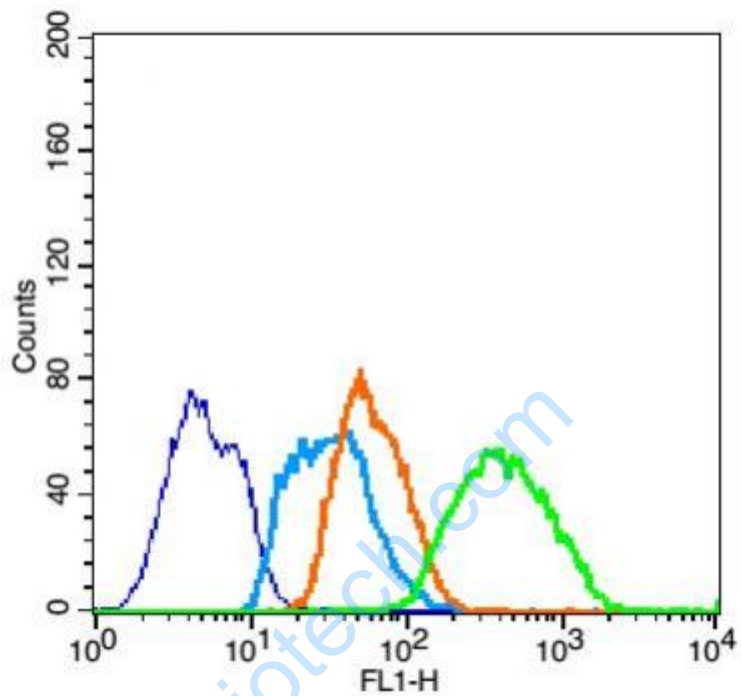


Picture:

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (phospho-Nrf2 (Ser40)) Polyclonal Antibody, Unconjugated (SL2013R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (phospho-Nrf2 (Ser40)) Polyclonal Antibody, Unconjugated (SL2013R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.



Blank control (blue line): Jurkat (fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody (green line): Rabbit Anti-phospho-Nrf2 (Ser40) antibody (SL2013R), Dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC, Dilution: 1 μ g /test.