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NFE2L2 Antibody (S40)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7275D

Specification

NFE2L2 Antibody (S40) - Product Information

Application	WB,E
Primary Accession	Q16236
Other Accession	NP_006155
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	67827
Antigen Region	12-44

NFE2L2 Antibody (S40) - Additional Information

Gene ID 4780

Other Names
Nuclear factor erythroid 2-related factor 2, NF-E2-related factor 2, NFE2-related factor 2, HEBP1, Nuclear factor, erythroid derived 2, like 2, NFE2L2, NRF2

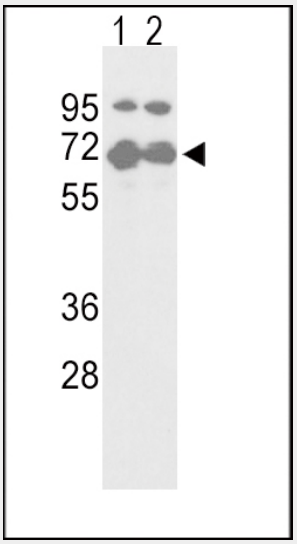
Target/Specificity
This NFE2L2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-44 amino acids from human NFE2L2.

Dilution
WB~~1:1000

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
NFE2L2 Antibody (S40) is for research use only and not for use in diagnostic or



Western blot analysis of NFE2L2-S40 (Cat.#AP7275d) in T47D(lane 1) and 293(lane 2) cell line lysates (35ug/lane). NFE2L2 (arrow) was detected using the purified Pab.

NFE2L2 Antibody (S40) - Background

NFE2 (MIM 601490), NFE2L1 (MIM 163260), and NFE2L2 comprise a family of human basic leucine zipper (bZIP) transcription factors. They share highly conserved regions that are distinct from other bZIP families, such as JUN (MIM 165160) and FOS (MIM 164810), although remaining regions have diverged considerably from each other (Chan et al., 1995).

NFE2L2 Antibody (S40) - References

Zhao,X., Stroke 38 (12), 3280-3286 (2007)
Li,M.H., J. Biol. Chem. 282 (39), 28577-28586 (2007)

therapeutic procedures.

NFE2L2 Antibody (S40) - Protein Information

Name NFE2L2 {ECO:0000303|PubMed:29018201, ECO:0000312|HGNC:HGNC:7782}

Function
Transcription factor that plays a key role in the response to oxidative stress: binds to antioxidant response (ARE) elements present in the promoter region of many cytoprotective genes, such as phase 2 detoxifying enzymes, and promotes their expression, thereby neutralizing reactive electrophiles (PubMed:11035812, PubMed:19489739, PubMed:29018201, PubMed:31398338). In normal conditions, ubiquitinated and degraded in the cytoplasm by the BCR(KEAP1) complex (PubMed:11035812, PubMed:15601839, PubMed:29018201). In response to oxidative stress, electrophile metabolites inhibit activity of the BCR(KEAP1) complex, promoting nuclear accumulation of NFE2L2/NRF2, heterodimerization with one of the small Maf proteins and binding to ARE elements of cytoprotective target genes (PubMed:19489739, PubMed:29590092). The NFE2L2/NRF2 pathway is also activated in response to selective autophagy: autophagy promotes interaction between KEAP1 and SQSTM1/p62 and subsequent inactivation of the BCR(KEAP1) complex,

leading to NFE2L2/NRF2 nuclear accumulation and expression of cytoprotective genes (PubMed:20452972). May also 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 (PubMed:7937919).

Cellular Location
Cytoplasm, cytosol. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:11035812, ECO:0000269|PubMed:15601839, ECO:0000269|PubMed:21196497} Note=Cytosolic under unstressed conditions: 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).

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

NFE2L2 Antibody (S40) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture