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NFE2L1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57549

Specification

NFE2L1 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q14494
Reactivity	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**85 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human NFE2L1**
Epitope Specificity	**141-240/772**
Isotype	**IgG**

Purity
affinity purified by Protein A

Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Nucleus.**
SIMILARITY	**Belongs to the bZIP family. CNC subfamily. Contains 1 bZIP domain.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
This gene encodes a protein that is involved in globin gene expression in erythrocytes. Confusion has occurred in bibliographic databases due to the shared symbol of NRF1 for this gene, NFE2L1, and for "nuclear respiratory factor 1" which has an official symbol of NRF1. [provided by RefSeq, Jul 2008]

NFE2L1 Polyclonal Antibody - Additional Information

Gene ID 4779

Other Names
Endoplasmic reticulum membrane sensor NFE2L1, Locus control region-factor 1, LCR-F1, Nuclear factor erythroid 2-related factor 1, NF-E2-related factor 1, NFE2-related factor 1, Nuclear factor, erythroid derived 2, like 1, Protein NRF1, p120 form, Transcription factor 11, TCF-11, Transcription factor NRF1, Protein NRF1, p110 form, NFE2L1

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. 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 ℃.

NFE2L1 Polyclonal Antibody - Protein Information

Name NFE2L1

Function
[Endoplasmic reticulum membrane sensor NFE2L1]: Endoplasmic reticulum membrane sensor that translocates into the nucleus in response to various stresses to act as a transcription factor (PubMed:20932482, PubMed:24448410). Constitutes a precursor of the transcription factor NRF1 (By similarity). Able to detect various cellular stresses, such as cholesterol excess, oxidative stress or proteasome inhibition (PubMed:20932482). In response to stress, it is released from the endoplasmic reticulum membrane following cleavage by the protease DDI2 and translocates into the nucleus to form the transcription factor NRF1 (By similarity). Acts as a key sensor of cholesterol excess: in excess cholesterol conditions, the endoplasmic reticulum membrane form of the protein directly binds cholesterol via its CRAC motif, preventing cleavage and release of the transcription factor NRF1, thereby allowing expression of genes promoting cholesterol removal, such as CD36 (By similarity). Involved in proteasome homeostasis: in response to proteasome inhibition, it is released from the endoplasmic reticulum membrane, translocates to the nucleus and activates expression of genes encoding proteasome subunits (PubMed:20932482).

Cellular Location
[Endoplasmic reticulum membrane sensor NFE2L1]: Endoplasmic reticulum membrane; Single-pass type II membrane protein. Endoplasmic reticulum membrane; Single-pass type III membrane protein. Note=In normal conditions, probably has a single-pass type II membrane protein topology, with the DNA-binding domain facing the endoplasmic reticulum lumen (PubMed:24448410). Following cellular stress, it is rapidly and efficiently retrotranslocated to the cytosolic side of the membrane, a process dependent on p97/VCP, to have a single-pass type III membrane protein topology with the major part of the protein facing the cytosol (PubMed:24448410). Retrotranslocated proteins are normally rapidly degraded by the proteasome and active species do not accumulate (PubMed:24448410). However, retrotranslocated protein NFE2L1 escapes degradation and is cleaved at Leu-104 by DDI2, releasing the protein from the endoplasmic reticulum membrane and forming the transcription factor NRF1 that translocates into the nucleus (PubMed:24448410)

NFE2L1 Polyclonal Antibody - 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

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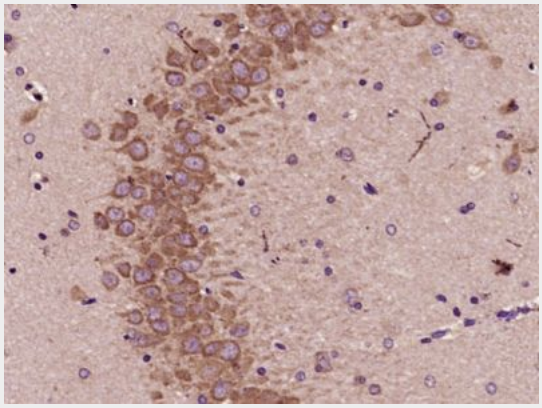
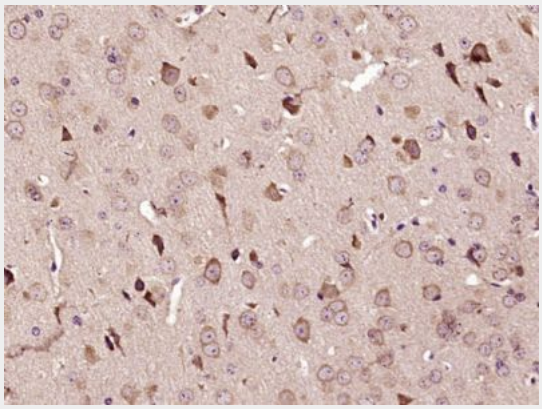
NFE2L1 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NFE2L1) Polyclonal Antibody, Unconjugated (bs-19498R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NFE2L1) Polyclonal Antibody, Unconjugated (bs-19498R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.