

Product datasheet

Anti-NFE2 antibody [EPR2824(2)] ab140598

Recombinant RabMAb

[1 References](#) [5 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-NFE2 antibody [EPR2824(2)] |
| Description | Rabbit monoclonal [EPR2824(2)] to NFE2 |
| Host species | Rabbit |
| Tested applications | Suitable for: ICC/IF, IP, WB, IHC-P Unsuitable for: Flow Cyt |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide within Human NFE2 aa 250-350. The exact sequence is proprietary. |
| Positive control | Recombinant Human NFE2 protein (ab117042) can be used as a positive control in WB. 293T, HeLa, K562, and U937 cell lysates, Human colon , Human testis and Human tonsil tissues |
| General notes | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> |

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. |
| Storage buffer | pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR2824(2) |

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab140598 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|---|
| ICC/IF | | Use at an assay dependent concentration. |
| IP | | Use at an assay dependent concentration. |
| WB | | 1/1000 - 1/10000. Predicted molecular weight: 41 kDa. |
| IHC-P | | 1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

Application notes

Is unsuitable for Flow Cyt.

Target

Function

Component of the NF-E2 complex essential for regulating erythroid and megakaryocytic maturation and differentiation. Binds to the hypersensitive site 2 (HS2) of the beta-globin control region (LCR). This subunit (NFE2) recognizes the TCAT/C sequence of the AP-1-like core palindrome present in a number of erythroid and megakaryocytic gene promoters. Requires MAFK or other small MAF proteins for binding to the NF-E2 motif. May play a role in all aspects of hemoglobin production from globin and heme synthesis to procurement of iron.

Tissue specificity

Expressed in hematopoietic cells and also in colon and testis.

Sequence similarities

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

Domain

The PXY motifs are required for binding WW domains. PXY1 is required to promote transactivation of beta-globin and for hyperacetylation of histone H3, but not for binding to the HS2 promoter site.

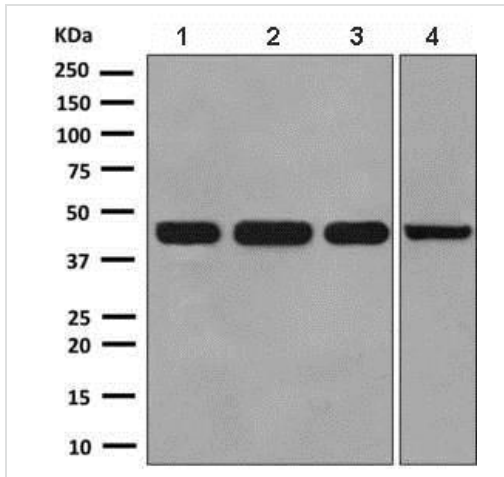
Post-translational modifications

Phosphorylated on serine residues (By similarity). In undifferentiated erythrocytes, phosphorylated by MAPK8 which then leads to ubiquitination and protein degradation.
Sumoylated. Sumoylation is required for translocation to nuclear bodies PODs, anchoring to the gene loci, and transactivation of the beta-globin gene.
Ubiquitinated mainly by 'Lys63'-linked ubiquitin. Polyubiquitination with 'Lys63'-linked ubiquitin by ITCH retains NFE2 in the cytoplasm preventing its transactivation activity. In undifferentiated erythrocyte, ubiquitinated after MAPK8-mediated phosphorylation leading to protein degradation.

Cellular localization

Nucleus > PML body. Cytoplasm. The sumoylated form locates to the nuclear bodies PML oncogenic domains (PODs). Translocated to the cytoplasm through interaction with ITCH.

Images



Western blot - Anti-NFE2 antibody [EPR2824(2)] (ab140598)

All lanes : Anti-NFE2 antibody [EPR2824(2)] (ab140598) at 1/1000 dilution

Lane 1 : 293T cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : K562 cell lysate

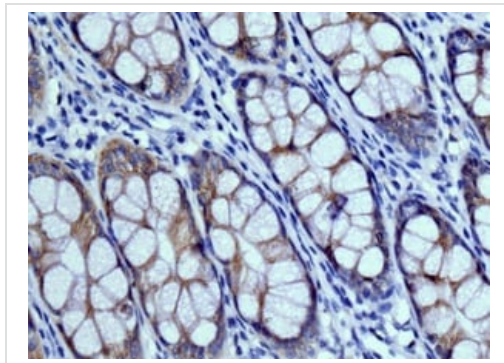
Lane 4 : U937 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

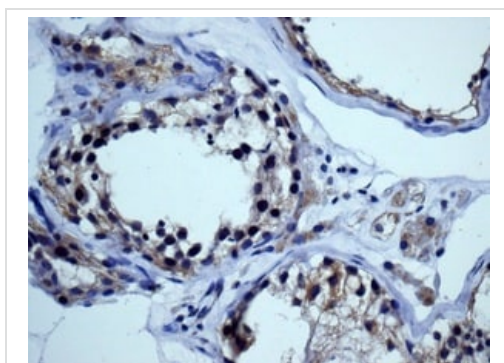
Predicted band size: 41 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NFE2 antibody [EPR2824(2)] (ab140598)

Immunohistochemical analysis of paraffin embedded Human colon tissue labelling NFE2 with ab140598 antibody at a dilution of 1/100.

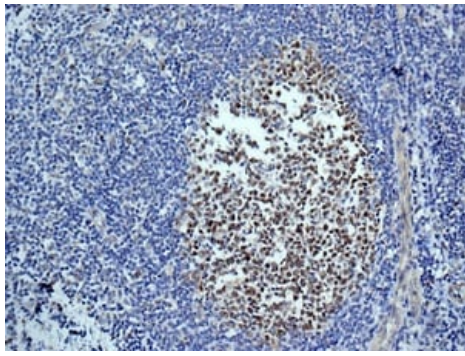
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NFE2 antibody [EPR2824(2)] (ab140598)

Immunohistochemical analysis of paraffin embedded Human testis tissue labelling NFE2 with ab140598 antibody at a dilution of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemical analysis of paraffin embedded Human tonsil tissue labelling NFE2 with ab140598 antibody at a dilution of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NFE2 antibody [EPR2824(2)] (ab140598)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-NFE2 antibody [EPR2824(2)] (ab140598)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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