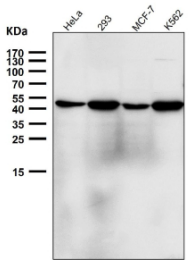
NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker [clone 31N33] (FY12867)

Catalog No.	Formulation	Size
FY12867	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

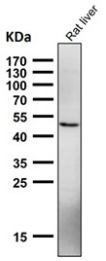
Recombinant RABBIT MONOCLONAL

Bulk quote request

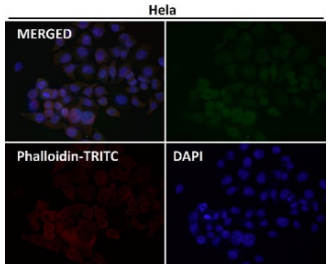
Availability	2-3 weeks
Species Reactivity	Human, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31N33
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q16621
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry/Immunofluorescence: 1:50-1:200 Immunoprecipitation: 1:50
Limitations	This NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker is available for research use only.



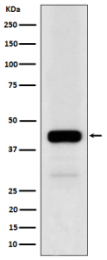
NFE2 Antibody 31N33 Western Blot. Western blot testing with NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker, clone 31N33, at 1:2000 dilution for 1 hour at RT. The predicted molecular weight of NFE2 is approximately 41 kDa, with the protein observed at 41-45 kDa.



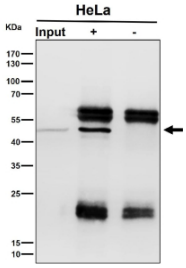
NFE2 Antibody 31N33 in Rat Liver WB. Western blot testing of rat liver tissue lysate with NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker, clone 31N33, at 1:2000 dilution for 1 hour at RT. The predicted molecular weight of NFE2 is approximately 41 kDa, with the protein observed at 41-45 kDa.



NFE2 Antibody 31N33 Immunofluorescence IF. Immunofluorescence analysis with NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker, clone 31N33, at 1:50 dilution demonstrates detection of NFE2 protein.



NFE2 Antibody 31N33 in Human K562 Erythroleukemia Cells WB. Western blot analysis of human K562 erythroleukemia cell lysate with NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker, clone 31N33. The predicted molecular weight of NFE2 is approximately 41 kDa, with the protein observed at 41-45 kDa.



NFE2 Antibody 31N33 Immunoprecipitation IP. Immunoprecipitation analysis with NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker, clone 31N33, at 1:50 dilution. Western blot detection was performed at 1:1000 dilution.

Description

NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker detects nuclear factor erythroid 2 (NFE2), a transcription factor with important functions in erythroid and megakaryocytic differentiation. NFE2 is the 45 kDa large subunit of the NF-E2 transcription factor complex and belongs to the cap'n'collar basic leucine zipper family of transcriptional regulators. It forms heterodimers with small Maf proteins that recognize regulatory DNA elements and control expression of genes involved in hematopoietic cell differentiation and function.

NFE2 was originally characterized through its role in erythroid gene regulation. The NF-E2 complex binds regulatory elements associated with globin gene expression and contributes to transcriptional programs required during erythroid maturation. Its activity is therefore relevant to research examining erythropoiesis, hemoglobin production and the molecular mechanisms governing differentiation of hematopoietic progenitor cells. NFE2 also participates in regulation of genes involved in cellular responses to oxidative and electrophilic stress through interactions with Maf family transcription factors.

Beyond erythroid cells, NFE2 has a particularly important role in megakaryocyte biology and platelet production. NFE2 expression increases during megakaryocytic differentiation and contributes to late stages of megakaryocyte maturation, proplatelet formation and thrombopoiesis. Disruption of NFE2 activity can impair platelet production, while altered

expression has been investigated in hematologic disorders involving abnormal erythroid or megakaryocytic proliferation.

NFE2 is also studied in myeloproliferative neoplasms and other hematologic malignancies. Increased NFE2 expression has been reported in subsets of myeloproliferative disease, and changes in its transcriptional activity may influence proliferation, differentiation and lineage-specific gene expression. These connections make an erythroid transcription factor marker useful for studying normal hematopoiesis as well as disease-associated alterations in hematopoietic cell development.

Clone 31N33 is a recombinant rabbit monoclonal antibody directed against human NFE2. The antibody has been evaluated by western blot, immunofluorescence and immunoprecipitation, providing complementary approaches for investigating NFE2 protein expression and localization. Recombinant production provides a defined antibody sequence and supports consistent performance across manufacturing lots. NSJ Bioreagents supplies antibodies for hematopoiesis, transcription factor and cell differentiation research. An NFE2 Antibody can be used to investigate erythroid differentiation, megakaryocyte biology, hematopoiesis and NFE2-dependent transcriptional regulation.

For additional antibodies targeting regulators of intracellular signaling and transcriptional responses, explore our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the NFE2 Antibody 31N33 / Erythroid Transcription Factor Marker should be determined by the researcher.

Immunogen

A synthesized peptide derived from human NFE2 was used as the immunogen for the NFE2 antibody.

Storage

Store the NFE2 antibody at -20oC.

Alternate Names

NFE2 antibody, Erythroid Transcription Factor Marker antibody, Nuclear Factor Erythroid 2 antibody, NF-E2 antibody, NF-E2 p45 antibody

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