

Recombinant Human NFE2 protein ab117042

1 Image

Description

Product name	Recombinant Human NFE2 protein
Expression system	Wheat germ
Accession	<u>Q16621</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MSPCPPQQSRNRVIQLSTSELGEMELTWQEIMSITELQGL NAPSEPSFEP QAPAPYLGPPPPPTYCPCSIHPDSGFPLPPPPYELPASTS HVPDPPYSYG NMAIPVSKPLSLSGLLSEPLQDPLALLDIGLPAGPPKPQE DPESDSGLSL NYSDAESLELEGTEAGRRRSEYVEMYVVEYPYSLMPNSL AHSNYTLPAAE TPLALEPSSGPVRAKPTARGEAGSRDERRALAMKIPFPT DKIVNLPVDDF NELLARYPLTESQLALVRDIRRRGKNKVAAQNCRKRKLETI VQLERELER LTNERERLLRARGEADRTLEVMRQQLTELYRDIFQHLRDE SGNSYSPEEYALQQAADGTIFLVPRGTKMEATD
Predicted molecular weight	67 kDa including tags
Amino acids	1 to 373

Specifications

Our <b>Abpromise guarantee</b> covers the use of <b>ab117042</b> in the following tested applications.	
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.	
Applications	ELISA SDS-PAGE Western blot
Form	Liquid

**Additional notes**

This product was previously labelled as Nuclear Factor Erythroid Derived 2.

**Preparation and Storage**

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**Stability and Storage**

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.3% Glutathione, 0.79% Tris HCl

**General Info**

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**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**

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SDS-PAGE - Recombinant Human NFE2 protein  
(ab117042)

12.5% SDS-PAGE stained with Coomassie Blue showing  
ab117042 at approximately 66.77 kDa.

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

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