



## NF-E2 antibody

Cat. No.	C15410240	Specificity:	Human, mouse
Туре:	Polyclonal	Purity:	Affinity purified.
Source:	Rabbit	Storage:	Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.
Lot:	43607	Storage buffer:	PBS containing 1% BSA, 20% glycerol and 0.025% proclin
Size:	100 µl		
Concentration:	0.32 µg/µl		

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Description:** Polyclonal antibody raised in rabbit against NF-E2 (nuclear factor (erythroid-derived 2), 45kDa), using a recombinant protein.

### **Applications**

Applications	Suggested dilution	References
ChIP*	2-5 μg per ChIP	Fig 1, 2
Western blotting	1:1,000	Fig 3
Immunoprecipitation	1:100 - 1:1,000	Fig 4

\* Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 1-5 µg per IP.

### Target description

NF-E2 (UniProt/Swiss-Prot entry Q16621) is a component of the NF-E2 complex which is essential for the regulation of erythroid and megakaryocytic maturation and differentiation. It may play a role in all aspects of hemoglobin production from globin and heme synthesis to procurement of iron.

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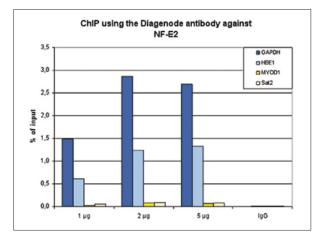
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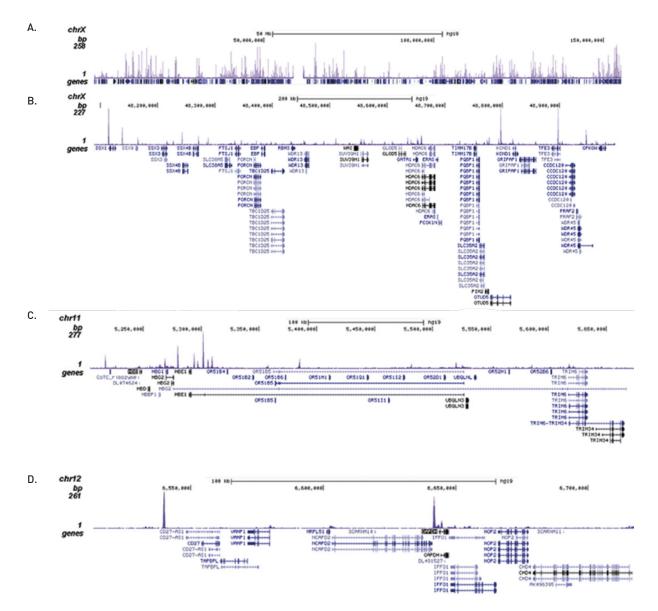
#### Last update: October, 2022

### Results



## Figure 1. ChIP results obtained with the Diagenode antibody directed against NF-E2

ChIP assays were performed using K562 cells, the Diagenode antibody against NF-E2 (Cat. No. C15410240) and optimized primer sets for qPCR. ChIP was performed with the "iDeal ChIPseq" kit (Cat. No. C01010055), using sheared chromatin from 4 million cells. A titration of the antibody consisting of 1, 2 and 5 µg per ChIP experiment was analysed. IgG (1 µg/IP) was used as negative IP control. QPCR was performed with primers for the HBE1 and GAPDH genes, used as positive controls, and for the MYOD1 gene and the Sat2 satellite repeat, used as negative controls. Figure 1 shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).

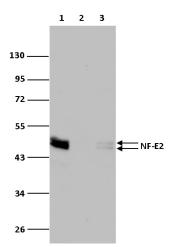




ChIP was performed on sheared chromatin from 5 million K562 cells using 5 µg of the Diagenode antibody against NFE2 (Cat. No. C15410240). The IP'd DNA was subsequently analysed on an Illumina HiSeq. Library preparation, cluster generation and

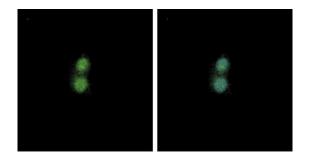


sequencing were performed according to the manufacturer's instructions. The 50 bp tags were aligned to the human genome using the BWA algorithm. Figure 2 shows the enrichment along the complete sequence and a 1 Mb region of the human X chromosome (fig 2A and B), and in a two genomic regions of chromosome 11 and 12 surrounding the HB cluster and the GAPDH genes, respectively.



# Figure 3. Western blot analysis using the Diagenode antibody directed against NF-E2

Whole cell extracts from K562, THP-1 and HL-60 cells (lane 1, 2 and 3, respectively) were analysed by Western blot using the Diagenode antibody against NF-E2 (cat. No. C15410240) diluted 1:1,000. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.



## Figure 4. Immunofluorescence with the Diagenode antibody directed against NF-E2

HepG2 cells were fixed with 4% formaldehyde for 15' at room temperature and stained with the Diagenode antibody against NF-E2 (Cat. C15410240) diluted 1:500 (left). The right picture shows costaining with Hoechst 33342 nucleic acid stain.

