

NFE2L2 Blocking Peptide (N-term)

Synthetic peptide

Catalog # BP7275a

Specification**NFE2L2 Blocking Peptide (N-term) - Product Information**

Primary Accession [Q16236](#)
Other Accession [Q54968](#), [Q60795](#),
[NP_006155](#)

NFE2L2 Blocking Peptide (N-term) - Additional Information**Gene ID** 4780**Other Names**

Nuclear factor erythroid 2-related factor 2,
NF-E2-related factor 2, NFE2-related factor
2, HEBP1, Nuclear factor, erythroid derived
2, like 2, NFE2L2, NRF2

Target/Specificity

The synthetic peptide sequence is selected
from aa 45-59 of HUMAN NFE2L2

Format

Peptides are lyophilized in a solid powder
format. Peptides can be reconstituted in
solution using the appropriate buffer as
needed.

Storage

Maintain refrigerated at 2-8°C for up to 6
months. For long term storage store at
-20°C.

Precautions

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

NFE2L2 Blocking Peptide (N-term) - Protein Information**Name** NFE2L2

{ECO:0000303|PubMed:29018201,
ECO:0000312|HGNC:HGNC:7782}

Function**NFE2L2 Blocking Peptide (N-term) - Background**

NFE2 (MIM 601490), NFE2L1 (MIM 163260),
and NFE2L2 comprise a family of human basic
leucine zipper (bZIP) transcription factors. They
share highly conserved regions that are
distinct from other bZIP families, such as JUN
(MIM 165160) and FOS (MIM 164810), although
remaining regions have diverged considerably
from each other (Chan et al., 1995).

NFE2L2 Blocking Peptide (N-term) - References

Zhao,X., Stroke 38 (12), 3280-3286 (2007)
Li,M.H., J. Biol. Chem. 282 (39), 28577-28586
(2007)

Transcription factor that plays a key role in the response to oxidative stress: binds to antioxidant response (ARE) elements present in the promoter region of many cytoprotective genes, such as phase 2 detoxifying enzymes, and promotes their expression, thereby neutralizing reactive electrophiles (PubMed:11035812, PubMed:19489739, PubMed:29018201, PubMed:31398338). In normal conditions, ubiquitinated and degraded in the cytoplasm by the BCR(KEAP1) complex (PubMed:11035812, PubMed:15601839, PubMed:29018201). In response to oxidative stress, electrophile metabolites inhibit activity of the BCR(KEAP1) complex, promoting nuclear accumulation of NFE2L2/NRF2, heterodimerization with one of the small Maf proteins and binding to ARE elements of cytoprotective target genes (PubMed:19489739, PubMed:29590092). The NFE2L2/NRF2 pathway is also activated in response to selective autophagy: autophagy promotes interaction between KEAP1 and SQSTM1/p62 and subsequent inactivation of the BCR(KEAP1) complex, leading to NFE2L2/NRF2 nuclear accumulation and expression of cytoprotective genes (PubMed:20452972). May also be involved in the transcriptional activation of genes of the beta-globin cluster by mediating enhancer activity of hypersensitive site 2 of the beta-globin locus control region (PubMed:11035812).

[://www.uniprot.org/citations/7937919](https://www.uniprot.org/citations/7937919)"
target="_blank">7937919).

Cellular Location

Cytoplasm, cytosol. Nucleus
{ECO:0000255|PROSITE-ProRule:PRU00978,
ECO:0000269|PubMed:11035812,
ECO:0000269|PubMed:15601839,
ECO:0000269|PubMed:21196497}
Note=Cytosolic under unstressed
conditions: ubiquitinated and degraded by
the BCR(KEAP1) E3 ubiquitin ligase complex
(PubMed:15601839, PubMed:21196497).
Translocates into the nucleus upon
induction by electrophilic agents that
inactivate the BCR(KEAP1) E3 ubiquitin
ligase complex (PubMed:21196497).

Tissue Location

Widely expressed. Highest expression in
adult muscle, kidney, lung, liver and in fetal
muscle

**NFE2L2 Blocking Peptide (N-term) -
Protocols**

Provided below are standard protocols that you
may find useful for product applications.

- [Blocking Peptides](#)