

## ID4 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP9977a

## **Specification**

## ID4 Antibody (N-term) Blocking Peptide - Product Information

**Primary Accession** 

P47928

## ID4 Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID 3400** 

#### **Other Names**

DNA-binding protein inhibitor ID-4, Class B basic helix-loop-helix protein 27, bHLHb27, Inhibitor of DNA binding 4, Inhibitor of differentiation 4, ID4, BHLHB27

#### **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.

#### ID4 Antibody (N-term) Blocking Peptide - Protein Information

Name ID4

**Synonyms** BHLHB27

#### **Function**

Transcriptional regulator (lacking a basic DNA binding domain) which negatively regulates the basic helix-loop-helix (bHLH) transcription factors by forming heterodimers and inhibiting their DNA binding and transcriptional activity. Implicated in regulating a variety of cellular processes, including cellular growth, senescence, differentiation, apoptosis, angiogenesis, and neoplastic transformation (By similarity).

#### **Cellular Location**

Nucleus.

# ID4 Antibody (N-term) Blocking Peptide - Protocols

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



• Blocking Peptides

## ID4 Antibody (N-term) Blocking Peptide - Images

# ID4 Antibody (N-term) Blocking Peptide - Background

ID4 is transcription factors containing a basic helix-loop-helix (bHLH) motif regulate expression of tissue-specific genes in a number of mammalian and insect systems. DNA-binding activity of the bHLH proteins is dependent on formation of homo- and/or heterodimers. Dominant-negative HLH proteins encoded by Id-related genes, such as ID4, also contain the HLH-dimerization domain but lack the DNA-binding basic domain. Consequently, Id proteins inhibit binding to DNA and transcriptional transactivation by heterodimerization with bHLH proteins

## ID4 Antibody (N-term) Blocking Peptide - References

Fontemaggi, G., et al. Nat. Struct. Mol. Biol. 16(10):1086-1093(2009)Uhm, K.O., et al. J. Korean Med. Sci. 24(3):493-497(2009)