

# **APEH Antibody (N-term) Blocking Peptide**

Synthetic peptide Catalog # BP1255a

## **Specification**

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

Primary Accession P13798

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

Gene ID 327

#### **Other Names**

Acylamino-acid-releasing enzyme, AARE, Acyl-peptide hydrolase, APH, Acylaminoacyl-peptidase, Oxidized protein hydrolase, OPH, APEH, D3F15S2, D3S48E, DNF15S2

# **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/products/AP1255a>AP1255a</a> was selected from the N-term region of human APEH. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **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.

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

#### Name APEH

Synonyms D3F15S2, D3S48E, DNF15S2

### **Function**

This enzyme catalyzes the hydrolysis of the N-terminal peptide bond of an N-acetylated peptide to generate an N-acetylated amino acid and a peptide with a free N-terminus (PubMed:<a href="http://www.uniprot.org/citations/10719179" target="\_blank">10719179</a>, PubMed:<a href="http://www.uniprot.org/citations/2006156" target="\_blank">2006156</a>, PubMed:<a href="http://www.uniprot.org/citations/1740429" target="\_blank">1740429</a>). It preferentially cleaves off Ac-Ala, Ac-Met and Ac-Ser (By similarity). Also, involved in the degradation of oxidized and glycated proteins (PubMed:<a href="http://www.uniprot.org/citations/10719179" target="\_blank">10719179</a>).



**Cellular Location** Cytoplasm.

**Tissue Location**Expressed in erythrocytes (at protein level).

## **APEH Antibody (N-term) Blocking Peptide - Protocols**

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

# • Blocking Peptides

APEH Antibody (N-term) Blocking Peptide - Images

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

APEH is the enzyme acylpeptide hydrolase, which catalyzes the hydrolysis of the terminal acetylated amino acid preferentially from small acetylated peptides. The acetyl amino acid formed by this hydrolase is further processed to acetate and a free amino acid by an aminoacylase. APEH gene is located within the same region of chromosome 3 (3p21) as the aminoacylase gene, and deletions at this locus are also associated with a decrease in aminoacylase activity. The acylpeptide hydrolase is a homotetrameric protein of 300 kDa with each subunit consisting of 732 amino acid residues. The protein can play an important role in destroying oxidatively damaged proteins in living cells.

## **APEH Antibody (N-term) Blocking Peptide - References**

Perrier, J., Giardina, T. Biol. Cell 94 (1), 45-54 (2002) Erlandsson, R., Boldog, F. Oncogene 6 (7), 1293-1295 (1991) Erlandsson, R., Bergerheim, U.S. Oncogene 5 (8), 1207-1211 (1990)