

#### AHRR Antibody (Center) Blocking peptide Synthetic peptide

Catalog # BP9065c

## Specification

# AHRR Antibody (Center) Blocking peptide - Product Information

Primary Accession

## <u>A9YTQ3</u>

## AHRR Antibody (Center) Blocking peptide - Additional Information

Gene ID 57491

**Other Names** 

Aryl hydrocarbon receptor repressor, AhR repressor, AhRR, Class E basic helix-loop-helix protein 77, bHLHe77, AHRR, BHLHE77, KIAA1234

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP9065c>AP9065c</a> was selected from the Center region of human AHRR. 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.

## AHRR Antibody (Center) Blocking peptide - Protein Information

Name AHRR

Synonyms BHLHE77, KIAA1234

#### Function

Mediates dioxin toxicity and is involved in regulation of cell growth and differentiation. Represses the transcription activity of AHR by competing with this transcription factor for heterodimer formation with the ARNT and subsequently binding to the xenobiotic response element (XRE) sequence present in the promoter regulatory region of variety of genes. Represses CYP1A1 by binding the XRE sequence and recruiting ANKRA2, HDAC4 and/or HDAC5. Autoregulates its expression by associating with its own XRE site.

### **Cellular Location**

Cytoplasm. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981,



ECO:0000269|PubMed:17980155} Note=Predominantly in the nuclear compartment. First cytoplasmic, translocates into the nuclear compartment upon interaction with ARNT in the cytoplasmic compartment

**Tissue Location** 

Highly expressed in testis, lung, ovary, spleen and pancreas. Highly expressed in mononuclear cells (MNCs) from umbilical cord blood. Isoform 3 is highly expressed in lung, kidney, spleen and thymus. Down-regulated malignant tissue from different anatomical origins, including colon, breast, lung, stomach, cervix, and ovary

### AHRR Antibody (Center) Blocking peptide - Protocols

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

Blocking Peptides

#### AHRR Antibody (Center) Blocking peptide - Images

### AHRR Antibody (Center) Blocking peptide - Background

AHRR encoded by this gene represses signal transduction by the arylhydrocarbon receptor by competing with the arylhydrocarbon receptor nuclear translocator for binding to the arylhydrocarbon receptor. Expression of the repressor is stimulated by the receptor/translocator heterodimer, thereby regulating receptor function through a negative feedback mechanism. In addition, the encoded protein can bind to nuclear factor kappa-B.

### AHRR Antibody (Center) Blocking peptide - References

Davila,S., et.al., Genes Immun. (2010) In pressAsada,H., et.al., Fertil. Steril. 92 (4), 1240-1242 (2009)